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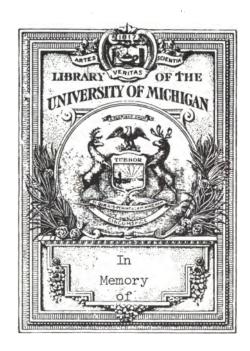
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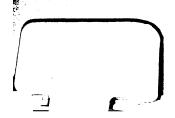
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David Friday



Section 1

# SOME PROBLEMS IN **CURRENT ECONOMICS**

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# PREFACE

HE substance of the present volume of essays on industrial economics is taken almost without change from a series of economic, financial, and statistical studies undertaken by the writer as an incident to his connection with a large public utility organization.

Each chapter is substantially complete in itself. However, the first four follow a definite sequence, and the fifth, in a sense, completes the series by discussing the application to current proposals for the improvement of working conditions of the facts and points of view presented in the preceding chapters.

The volume, as a whole, makes no pretense to thoroughness from the standpoint of the trained economist. Such merit as it may claim as introductory reading in economics for the business man, and for the student who may or may not expect to make a more thorough study of the science, arises very directly from the manner in which the text originated.

After nearly twenty years' experience as engineer and executive, the necessities of the writer's employment compelled him, as a very practical matter, to undertake a study of

economic fact and theory. In nearly every case the initial study of theory was incidental to the pressing demands of some practical problem. Further study frequently followed as the result of natural interest, and in preparation for other similar problems, but the initial impetus almost always arose from a definite business need. This peculiar background for the several essays, while explaining certain omissions, may also, it is hoped, give the volume some degree of special usefulness to the practical man who feels the need for a general knowledge of economics, but lacks the time necessary for the reading of more technical and extensive treatises.

Still a further word of explanation may be proper as to the writer's fundamental viewpoints. So far as it has seemed possible to do so, the various discussions have been based on fact rather than opinion or personal judgment. But the science of economics is not vet complete, and it is particularly incomplete in that range where human instincts and motives are The writer yields to no one in his desire to see ideals of fair dealing, of public service, and of cooperation, increase their influence in all lines of human activity, and particularly in the great field of the production and distribution of essential commodities and services. Yet he sees nothing in economic or human history to indicate that sound progress

can be attained in any way but through gradual evolution from our present capitalistic sys-And he feels that such evolution cannot safely precede, but must always follow, the development of the knowledge and intelligence and practical ideals of the average man. So far, therefore, as he would take issue with his more radical and idealistic friends it would be on this ground—that they hope to introduce economic systems which, in his opinion, would be operative only in the hands of public spirited and specially intelligent men, while he would cling to that system which is the outgrowth of average ideals and motives until the average man has so progressed as to justify a forward step in economic organization.

Such differences in viewpoint must always exist—and it is desirable that they should exist. Nevertheless, among those of differing viewpoints who are sincerely seeking for the truth, there is a common meeting ground in the search for the actual, tangible facts which must underly all sound economic reasoning. These introductory notes would not be complete without some special acknowledgment to the directors of the National Bureau of Economic Research, Inc. During its existence of less than three years, this Bureau has demonstrated that labor leaders, socialists, professional economists, and business men can cooperate with mutual tolerance and good will in the effort to

agree upon a common body of economic facts and "for impartial investigations in the field of economic, social and industrial science."

Under the procedure which the Bureau follows, findings of fact must be divorced from conclusions or propaganda, and, in addition, any director may express dissenting analyses of the facts by appending foot-notes to any report that is approved by a majority of the Individual directors are not predirectors. cluded from publishing their personal opinions. Nevertheless, the writer, in view of his present incumbency as president of the Bureau, has hesitated to publish the present volume (for which, of course, the Bureau assumes no responsibility) without some special effort to avoid what might seem to be an ultra-conservative viewpoint. Perhaps a partial solution has been found by submitting the text to certain of his more radical friends, including active labor leaders, and socialists, and inserting the substance of their comments as foot-notes. The bulk of this comment has been supplied by a specially well-informed and temperateminded socialist, who is also a strong supporter of the labor union movement. not at all certain that the reader may not find special value in this opposition of viewpoints as expressed in the text and the comment.

Acknowledgments are particularly due to Edwin F. Gay, Wesley C. Mitchell and Harry W. Laidler for many helpful comments and pertinent criticisms. Much of the good in the volume is theirs—the errors are mine. Special thanks must finally be offered to Messrs. S. L. Andrew and R. S. Coe among the writer's business associates, for much detailed assistance and many constructive suggestions.

M. C. Rorty.

195 Broadway, New York City. August 1, 1922.

# CHAPTER I

## INDUSTRIAL HISTORY

THE FEUD SPIRIT IN INDUSTRY

FEW years ago, a company operating out of Pittsburgh became rather unwillingly involved in a three-cornered business deal where the other two corners were occupied by opposing factions of West Virginia mountaineers. The situation soon became heated, and then more heated, until, in despair of any other solution, an ex-judge of the county was called upon to secure a court order to restrain one of the groups of mountaineers from interfering with the arrangements made by the other. The preliminary order was secured in due course, but, a few days before the date set for the hearing, the Pittsburgh company's elderly attorney sent word that he wished to withdraw from the case. He was promptly reached by telephone and asked to explain. "Well," said he, "there'll be shootin's, an' murders, an' burnin's for three generations over this affair already, and I've got to live with these folks." There was no answer to this statement, so the matter was compromised by agreeing to drop the legal proceedings if the old judge would get the opposing groups together and attempt to bring about a friendly settlement. This he

did, and his speech on the occasion of the joint meeting, while it touched very lightly indeed upon the original source of the difficulty, was nevertheless declared by those present to be the most profound and masterly discussion of proper and improper reasons for starting a feud that had ever been heard in the State of West Virginia. At any rate, it had the result that both factions agreed that their differences did not justify "shootin's, an' murders, an' burnin's for three generations," and the matter was finally settled in amicable fashion.

The point of this incident, as applied to the present economic situation, is that no one has yet drawn, for employer and employee, or for business organizations and the general public, a clear dividing line between what should be the basis for a feud and what the basis for a temperate and constructive difference of opinion. At the present time the air is filled with conflicting proposals for the cure of the many real and imaginary economic ills that afflict us. If we took all of the medicines prescribed, we should soon be in the position of a man who tried to cure the colic by beginning at one end of the drug store shelf and sampling his way, way down the line to the other end. The need today is, therefore, specially great, in the interest of all business and industry, for a full and dispassionate understanding of the real facts.

#### THE PROBLEMS OF BUSINESS MANAGEMENT

In the pioneer days in this country, the problems of business and economics were relatively uncomplicated. These paragraphs are being written in a back country farm house, so far from the railroad that coal is an unknown luxury. Only a few years ago a Chinese wall might have been built across the mouth of the valley, with little change in the life of the people. In fact, if such a wall were built today, the old equipment — spinning-wheels, handlooms, smoke houses, slaughtering frames, sap houses, blacksmith's forges, and wood-working tools—is still at hand and many items are in daily use. Fertile land can still be had for \$10 an acre—barely the value of the standing timber.

Here the problems of wages, profits, and rents are simple and elementary. After heavy rains, a few fine days have given a chance for hay cutting. The writer has helped his host cut and load the valley hay. There are still difficult mountain fields of poorer hay to be cut. Hay can be bought for \$10 a ton. A hired man can be had for \$3 or \$4 a day and board. The balance is very even. There is little chance for argument between the farmer and his employees. The profit to my host will be very doubtful if he must pay a hired man. Probably the mountain fields will be cut if the

writer volunteers to help—otherwise they may

not be worth the cutting.

If all of modern industry were organized along such simple lines and the relations between wages and productivity were equally simple and direct, many of our present-day controversies would vanish. Yet in many respects the problems are still the same. Each owner of a competitive business seeks to expand his operations until he reaches a point where added wages and added costs for borrowed money leave his margin of profit in doubt. Wages, in the end, are still determined by productivity. The individual worker may not always have his choice of employment, or of working for himself, but on the whole there is still an effective mobility of labor and no one occupation can for long pay greater or lesser rewards than another for equal skill and effort. Changes, readjustments, progress, and the elimination of abuses are required—but an even greater need is for clear understandings.

In the regulated public utilities the relations between the employees, the investors, and the public are particularly simple. There is no absolute measure of what wages of public utility employees should be. Such employees constitute, however, a selected and specially competent group of workers. They have special responsibilities. And the public should furnish the revenues necessary to enable them to be

paid at least as well as workers in comparable occupations in the localities they serve.

Similarly as to payments to bondholders and stockholders, the bonds and stocks of public utilities represent real money invested. The occasional "watering" of former days has, in most, if not all cases, been wiped out by the recent shrinkage in the value of the dollar. In many instances premiums paid for new stock issues have caused the actual money invested to exceed, by substantial amounts, the face value of outstanding securities. Many millions of dollars worth of public utility stocks owned, or are in process of purchase on easy terms, by public utility employees. It is, therefore, not only right, but necessary, that the investors in public utility securities shall receive returns reasonably comparable with those that they might receive if they invested in other businesses.

Furthermore, the public utilities must grow. They have no choice as to this. Many additions must be made as a matter of public necessity, if for no other reason. The utilities cannot grow, however, without securing large sums of new money each year. Some new plant can be built out of amounts set aside for the replacement of worn-out and obsolete equipment. A little can be built out of surplus earnings. But the bulk must be built out of new money secured in the open market in competition with

every other business that needs new money, and with governments, states, and municipalities as well. To secure such money, the utilities must not only offer attractive inducements to new investors, but, as an assurance to such new investors, must also pay reasonable returns to present stockholders and bondholders, and must give further evidence of financial soundness by showing their ability to lay aside each year a substantial surplus, after all requirements for labor, materials, interest, and dividends have been met.

These, then, are the special problems of public utility management—to secure adequate wages for employees; to secure adequate returns for old and new investors; and, by furnishing good service and proving economy in management, to secure from the public the rates necessary for both requirements.\*

As indicated in the prefatory note, the present volume is the outgrowth of a series of studies by the writer bearing directly and in-

\*The socialists and advocates of public ownership of utilities claim that interest charges and dividends could ultimately be largely eliminated under such ownership. The public utility managers claim, on the other hand, that such savings are theoretical rather than real, that actual experience indicates a greater probability that governmental operation would result in continually growing deficits to be met by taxation, and that in any case, without radical improvements in the management of public affairs, the wastes under governmental or socialized control would much more than offset any possible savings in capital charges.

directly upon these and other problems—upon the economic relationship between employees and owners in public utility service and in industry as a whole, and upon the mutual relations of both employees and owners to the general public. Liberal references have been made to books, periodicals, and published reports and documents, in order that those who wish to do so may gain, through further reading, a more thorough knowledge of those basic principles which must determine any sound solution of current industrial and economic problems.

#### WHAT MEN LIVE FOR

Political economy, like everything else affecting the lives of men and women, must finally be tested by the aid it gives to normal human beings in securing the things that they desire.

For the average man these desires are simple—life and health; comfort and security for home and family; regularity and certainty of employment; work that can be done with pride and self-respect; proper leisure for reading and recreation; and, above all, the feeling that the conditions that affect him are just and that he has a reasonable voice in determining them.

In the past, political economy has been called the "dismal science," for it began and ended in a fog of theories which rarely, if ever, gave workable answers to the real problems of human life. Today, the economists are speaking in plain language of the things that directly concern the lives of ordinary men. So far, then, as the present volume shall show the way to better living conditions, and shall indicate when and to what extent protest is justified and where and to what extent there should be contentment with things as they are, it shall have served its purpose. And just to the extent that it falls short of this end, it shall have failed.

#### THE BEGINNINGS OF HUMAN ORGANIZATION

The practical science of economics does not begin with the cave man, or with the wandering savage, but with men who have learned that they can better satisfy their needs by gathering together in organized nations and business enterprises. The beginnings of such organization are, however, hidden in the days before written history began. The long ages of slow development and the sudden flowering of our modern civilization are well brought out by one writer\* who says:

"In order to understand the light which the discovery of the vast age of mankind casts on our present position, our relation to the past, our hopes for the future,... let us imagine the whole history

<sup>\*</sup>Page 239, The New History, by James H. Robinson.

of mankind were crowded into twelve hours and we are living at noon of the long human day. . . For over eleven and one-half hours there is nothing to record. We know of no persons or events; we only infer that man was on earth, for we find his stone tools, bits of his pottery, and some of his pictures of mammoth and bison. At twenty minutes before twelve the earliest vestiges of Egyptian and Babylonian civilization begin to appear. The Greek literature and philosophy to which we owe so much are not seven minutes old. At one minute before twelve Lord Bacon wrote his 'Advancement of Learning,' and not one-half a minute has elapsed since man first began to use the steam engine to do his work for him.''

Human organization undoubtedly had its beginning through the grouping together of individuals and families into tribes for self-protection. With this grouping together for protection, there undoubtedly came also the beginnings of barter and trade and of specialization of work. Some men became hunters, others fishermen, and others herdsmen and tillers of the soil. But organized production on a large scale was unknown. Work was specialized only to the extent that the use of hand tools made such specialization possible. organization was primarily of a military type. Measures begun for protection were later perverted to the uses of aggression. When famine and pestilence did not keep numbers down, the more populous tribes, from time to time, swept over their natural boundaries and invaded their neighbors' lands. The leaders elected by the free will of a tribe assumed hereditary rights, and their descendants became despots to maintain their power. With the crude tools and methods employed in production, even the free man could barely earn for himself the rudest kind of food, shelter, and clothing, while large elements of all populations were held in actual or virtual slavery.

These conditions existed in Egypt Babylon 5,000 years before the Christian era began, and with only brief and rare exceptions they continued through all the years of recorded history until the beginning of the eighteenth century. It is even possible that conditions were worse, in some respects, at the end of this long period than at the beginning. Certainly there cannot have been much improvement, if we may trust the British historian\*, writing in the year 1848, when he describes the days of 1685 as "times when noblemen were destitute of comforts the want of which would be intolerable to a modern footman, when farmers and shopkeepers breakfasted on loaves, the very sight of which would raise a riot in a modern workhouse, when men died faster in the purest country air than they now die in the most pestilential lanes of our towns, and when men died faster in the lanes of our towns than they now die on the coast of Guiana."

<sup>\*</sup>Page 397, History of England, by T. B. Macaulay.

#### THE INDUSTRIAL REVOLUTION

During all the years of this first stage in industrial history, up to the middle of the eighteenth century, progress in practical science and in manufacturing methods had been very small. Gunpowder and the mariner's compass had been invented. Shipping and commerce had developed, and much attention had been given to the implements of warfare. But agriculture was as it had been for generations. Buildings were erected as in the days when Christ was a carpenter; and the carpenter's chisel of England was still made by the same crude methods as the Roman sword. Even the fundamental art of weaving cloth had seen little advance and. as stated\* by one writer, "In the textile industry . . . but two changes in the methods of doing work had been made between the time of the Greek civilization and the latter part of the eighteenth century. Penelope, who worked at her loom while awaiting the return Ulvsses, would have found nothing very strange in the art of weaving, could she have made a visit to the home of a textile worker in the beginning of the reign of George III. The spinning wheel had taken the place of the distaff, and a rough contrivance like the water wheel had come into use for fulling cloth. Outside of these two inventions, the processes of carding,

<sup>\*</sup>Page 88, Description of Industry, by H. C. Adams.

spinning, dyeing, weaving, and finishing cloth were, in England in 1760, what they had been the world over, time out of mind."

Yet the seeds of change had been sown. printing press was invented about the year 1451, and through its agency the scattered fragments of ancient sciences were gathered together and made available to a constantly increasing circle of readers. Under this influence there began in Italy, about the year 1500, the Renaissance, or Revival of Learning. progress of pure science thereafter was rapid. Astronomy moved forward with quick strides from the invention of the telescope by Galileo to the discovery of the laws of gravitation by Isaac Newton. Physics and chemistry were established as definite sciences, and mathematics in the hands of Descartes, Leibnitz and Euler became a powerful tool ready for the hand of the engineer and designer.

This new knowledge did not add directly to human comfort, but practical applications soon followed. The invention of the spinning jenny by Hargraves in 1765, and the "mule" (a textile machine), by Crompton in 1779, with various modifications and improvements, soon completely revolutionized the industry of weaving. The invention of the steam engine, which was first patented as a pumping device in 1769 and was applied to the propulsion of machinery 13 years later, proved the essential factor

in making possible the rise of the factory system, which brought about that change from limited production by hand to quantity production by machinery which is known as the "Industrial Revolution."

The effects of this revolution in increasing the productive power of mankind have perhaps nowhere been described better than by Marx and Engels, in the "Communist Manifesto" of 1848\*, when they said that the capital newly organized to meet the changed industrial conditions "during its rule of scarce 100 years has created more massive and more colossal productive forces than have all preceding generations together. Subjection of nature's forces to man, machinery, application of chemistry to industry and agriculture, steam-navigation, railways, electric telegraphs, clearing of whole continents for cultivation, canalization of rivers, whole populations conjured out of the ground—what earlier century had even a presentiment that such productive forces slumbered in the lap of social labor?"

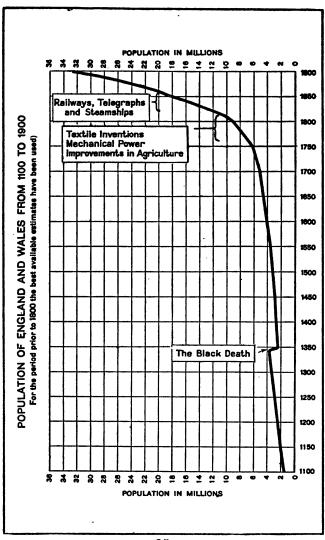
A further direct effect of the industrial revolution was to bring about a very great increase in population in the countries where factory methods were introduced. This increase is strikingly indicated by the chart (page 25) of the population of England and Wales from 1100 to 1900, on which is shown a population

<sup>\*</sup>Quoted on page 10, Socialism in Thought and Action, by H. W. Laidler.

very slowly increasing from about 2,000,000 in the year 1100 to about 6,000,000 in the year 1750, with a rapid upsweep to 14,000,000 in 1831, when the factory system had become well established, and with a further increase to about 33,000,000 by 1900.

With this rapid increase in population, it appeared for a time that the increase in mouths to feed and bodies to cover would absorb all of the increased production that science brought about. So real was this fear that in 1798 Malthus published his famous essay on "Population" in which he attempted to show that there was a tendency for population to increase up to the limit of subsistence, and that this tendency would always prevent any substantial improvement in the standard of living of the masses of the people. Subsequent developments have shown these extreme forebodings to be unwarranted. Daily wages of carpenters and masons in England between the years 1766 and 1800 averaged little more than the price of one-third of a bushel of wheat. By the year 1882 they had risen until a day's wage would buy three times this quantity; and approximately the same increases in real wages had taken place throughout the entire range of industrial employment. While, therefore, the rapid increases in population that arise out of modern industrial developments may have a

<sup>\*</sup>Page 313, History of Money and Prices, by J. Schoenhof.



tendency to restrict the improvements in standards of living that might otherwise take place, the evidence of the past 100 years is clear that production of the means of subsistence has increased in much greater ratio than human numbers.

A more serious problem, on the other hand, was that arising out of the concentration of workers in large cities and their entire dependence upon industrial employment, combined with what seemed to be an increasing tendency toward periodic business crises with accompanying long periods of unemployment and distress.

The first rapid sweep of the industrial revolution may be said to have ended with the nineteenth century—leaving these and other problems unsolved. It brought about a vast improvement in the living conditions of ordinary men. It gave them many luxuries. But it left them with a feeling of helplessness and insecurity in the grip of an economic organization that neither they nor any others fully understood. And, in creating comfort for the masses, it created also concentrations of wealth in individual hands that were a constant challenge to the justice of the distribution that was taking place.

#### THE PRESENT SITUATION

Now, in these early years of the twentieth century, the stage seems to be set for another great act in the drama of economic evolution.

As the first act came the pre-historic and historic struggle of man for the simplest necessities of existence—equipped with inadequate tools; lacking the resources of science and mechanics; handicapped by imperfect political institutions; oppressed by despotism; harassed by almost continual warfare; and periodically decimated by famine and pestilence.

As the second act came the industrial revolution—with its amazing growth in the sciences and the mechanical arts; with undreamed of increases in commerce and production; with very great and real improvements in the material and political conditions of the masses; and yet with want still prevalent, and with even the best informed of men helpless to control the new forces that science had set loose and largely ignorant of their ultimate meanings and of their ultimate reactions upon human life.

And today the scene stands ready for the further unfolding of the play through the intelligent harmonizing, for human welfare, of the knowledge that the years have given and the powers that the years have brought forth.

Political freedom we have in this country in large measure. Education is wide-spread. The forces of science and mechanics are being systematically developed and applied. Forms of political and industrial organization are well established and their limitations are known. Management is becoming more efficient, and those in charge of large enterprises are coming in constantly better faith to recognize their obligations to employees, to the public, and to investors alike, as trustees of great social instruments.

These are foundations upon which the future may be built. These are possessions too great to be carelessly or impatiently sacrificed.

It is true that with all these agencies at hand for the satisfaction of human needs, there is still discontent. It is true that recurring cycles of business depression bring unemployment and distress. It is true that there are wastes in production and wastes in distribution. It is true that there are questionable inequalities in the distribution of wealth.

Yet with all the faults of our present industrial organization, the fact remains that it is a going machine—powerful beyond any that man has ever before developed on a large scale to satisfy his needs, and flexible enough in design to adapt itself to whatever demands the future may make upon it. Adjustments may be needed here, a drop of oil there, new parts

in still another place, perhaps even a gradual transformation—but the machine as a whole must be preserved in continuous and certain operation.

And there is, furthermore, one great outstanding difference between the present times and the past. Until very recently, economic laws were almost wholly a matter of theory and speculation, and for this reason it was difficult to say what were serious and what were minor defects in any economic plan. But now, to a large degree, we can measure and weigh and give a value to each factor in our social and industrial organization.

If the question is how the total of all incomes is distributed between labor, land rents, interest and profits, we can answer "approximately 68% to labor, 8% to land rents, 16% to interest, and 8% to profits in excess of a normal interest rate."

If the question is what increase might the lower paid workers receive if all high salaries were reduced to \$5,000 a year, we can answer "not more than 2%."

\*Our socialistic critic of these paragraphs, in speaking of the demand for a fundamental change in the economic system, says that this demand "is not primarily concerned in the reduction of high salaries based on service, although many of these salaries could probably be reduced without injuring the incentive." He says further that such demand "is concerned rather with the elimination of property income, which accrues from mere ownership, and with the elimination of great competitive wastes." Similarly, if questions are raised as to the causes of business cycles and the possibility of their control, as to the effect of an eight- or six-hour day on wages and prices, as to the causes of high prices, as to the necessary relations between general wages and the cost of living, as to the relation of interest and dividend payments to wage payments in typical industries, or as to scores of other points that bear directly and indirectly upon the living conditions and welfare of ordinary men—to all of these questions answers can be given, supported by detailed facts that are wholly or in large part convincing to any reasoning man who will examine them.

Many of these questions will be discussed in succeeding chapters of the present volume. For present purposes, however, the significant point is that, whatever may be the evils and defects in our present industrial system, it does not give to men of great wealth more than a fraction of the useful goods that are produced, and the great balance remaining is distributed with reasonable fairness among the masses of men and women—as wages, as rents on small properties they own, and as interest and dividends on their savings. Furthermore, of the fraction that goes to the wealthier families, much is taken by the Government in income and inheritance taxes, while other large sums

are not consumed, but are reinvested in necessary productive enterprises.\*

These facts are far from justifying a "stand pat" attitude in respect to the natural and inevitable desire of every American for improved living conditions for himself and his children; but they do indicate that we have little to quarrel about, even if we have much to work for. As the old judge pointed out, there may be both proper and improper reasons for starting a feud. Barn burning may be a matter for powder and shot, but a raid on the jam closet is a matter for family discipline.

#### THE PROBLEMS OF THE FUTURE

If, then, it is admitted that present industrial conditions do not justify the reckless tearing down of all that we now have, what is the hope

\*Our socialist commentator, who does not criticize this paragraph as a whole, is, nevertheless, not willing to rely upon inheritance taxes or the tendency to pass "from shirt-sleeves to shirtsleeves in three generations" to prevent the maintaining of great family fortunes. He objects less to the building up of such fortunes by "captains of industry" than he does to their subsequent control by less capable and less useful descendents and writes: "This condition " " " " " s both unhealthy and unreasonable. It permits many sons of the rich, without any effort on their part, to live in idleness throughout their lives and yet to be richer at the end of their years than at the beginning. Often the only mental energy that they need expend is the selection of an efficient trust company, lawyer, broker, or administrator to take charge of their investments, or their decision to retain their investment in industries selected by their predecessors."

for the future? How may the conditions of ordinary men be improved? How may their comforts and their luxuries be increased? How may they have security of employment, and the feeling that they are something more than helpless cogs in a machine over which they have no control?

First, the real facts must be told, fully and exactly, without any "be good and you'll be happy" platitudes, and with a very clear recognition that fine arguments go a small way when it is a question of shoes for the children.

For the public utilities, as previously stated, the problem is well defined—it is to produce earnings sufficient to enable them to pay the liberal wages for money and the liberal wages for men and women that are equally essential to the maintenance and extension of an efficient service.

This, however, is only one part of the story. Wages are simply the counters with which the real things of life are purchased. The ratio of wages to prices finally determines living conditions, and prices are determined by the efficiency of the whole industrial organization, of which any particular industry can form only a small part. The employees of any single industry have, therefore, in addition to a primary interest in their own wages and in the success of their own business, a second equally

vital interest in the operations of the whole producing and distributing organization that supplies them with the things they consume.

What, then, is the way in which prices may be reduced? How may the efficiency of the industrial organization be increased?

Lenin and Trotsky in Russia believed that the answer lay in overturning the whole existing order of things. They preached the millennium—a four-hour working day and luxuries for everyone—as the result of proletariat control. But, if the press reports may be believed, they have wound up by permitting or enforcing working days of from eight to twelve hours, by offering high salaries to competent industrial managers, and by going out into the markets of the world in an attempt to borrow, at high interest rates, the money they need to build new industrial plants.

Some philosopher has said that the great art of politics lies in giving new and attractive names to old and disagreeable truths. If this is so, a great opportunity lies open today for some new master of words to gild and sugarcoat the old copybook maxims,—for regardless of what soap-box orators may say, and regardless of occasional large business and industrial profits, the hard fact remains that, in the long run,\* seventy-five cents out of every dollar we

\*Note: This figure becomes 68 cents out of each dollar, as indicated on page 29, when house rents and other items of family expenditure are averaged with purchases of commodities.

spend for commodities represents wages paid. The balance represents interest, profits, and land rents. There are ways in which the charges for these items may gradually be reduced, and some of these methods will be dis-

cussed in succeeding chapters.

But the major item is wages. Here is where the great gains and losses may be made. Here is where those who work as managers and those who work as beginners in the ranks of industry have a joint responsibility. Under free competition, if wages remain fixed, and production increases, prices will fall. If wages remain fixed, or rise, and production falls off, prices will rise. The bricklayer who cuts down the number of bricks he lays in a day, raises the rent of the weaver's house. The ploughman who loafs in the furrow raises the price of the bricklayer's bread. And the weaver who slows the loom raises, in turn, the price of the ploughman's coat.

During periods of unsettled prices, the general levels of wages and prices tend to rise and fall together, although not wholly in unison. But, in settled times, wages may rise as the reward for individual effort—while a fall in prices will be the measure of collective efficiency.

Yet the whole tale is not to be told in terms of direct human labor. Business organizations

must be improved. Wasteful processes and methods must be eliminated. New machines must be devised. Business depressions must be checked. And, above all, there must be between employer and employee, between industries and interests, between all factions and groups of men, that spirit of intelligent adjustment and compromise which Edmund Burke so well described in his great speech on Conciliation with America:—

"All government, indeed every human benefit and enjoyment, every virtue, and every prudent act, is founded on compromise and barter. We balance inconveniences; we give and take; we remit some rights that we may enjoy others; and we choose rather to be happy citizens than subtle disputants. As we must give away some natural liberty, to enjoy civil advantages, so we must sacrifice some civil liberties, for the advantages to be derived from the communion and fellowship of a great empire."

## CHAPTER II

## SOCIAL AND INDUSTRIAL ORGANIZATION

## THE BASIC VIEWPOINTS

RECENT writer\* has revived, in very interesting fashion, an old discussion as to whether man, as we know him, originated from animal ancestors of a solitary or of a social type. He argues, rather convincingly, from evidences of language and primitive customs, that the ancestors of man must have been highly socialized animals living much like the bee and the ant, and that the solitary man-like apes were not the progenitors of human kind, but represent instead merely side branches, or outlaws, from the evolutionary tree.

This discussion, aside from its purely scientific interest, has its very practical aspects. We shall have one very definite attitude toward present-day political evolution if we believe that society is developing from a primitive individualism toward a highly socialized form; and we shall have quite a different viewpoint if we see in human evolution a steady progression from a primitive and excessive socialism toward a scientific individualism which shall combine a large measure of personal freedom of

<sup>\*</sup>The Natural History of the State, by Henry Jones Ford.

initiative with the advantages of collective effort, where collective effort is required.

Although these two viewpoints are fundamental in their bearing on individual liberty and on the development of a social organization of the highest effectiveness, their relationship to our current economic problems is indirect. The purposes of human organization are one thing. The forms through which such purposes may be accomplished are quite another. And in these days of hectic emotions and tangled thinking, when the world shoots first and reasons afterward, there is great danger that human progress may be retarded, if not actually set back, by failure to make the distinction clear between purposes and methods.

### THE PURPOSES OF HUMAN ORGANIZATION

To avoid such confusion it is necessary to reduce to simple terms the demands that thinking men may make upon the social and industrial system. Such a system must permit each man to develop his own freedom and his own powers to the utmost, provided only he does not infringe upon the equal rights of his neighbors. It must be highly and continuously productive of the things that satisfy normal and proper human desires. And it must secure a just apportionment of this output among those that contribute to its creation.

These demands are not antagonistic. It is not necessary to sacrifice any true individual liberty to secure social ends. Rather may social ends be served by stimulating individual powers. It is not necessary to tear down all the tried forms of human association and organization, that the years have slowly built up, in order to secure the productivity that our needs require. Rather may we use these forms as the most effective agencies in such production. It is not necessary to deprive capital of a due reward, or savings of their incentive, in order to assure a just recompense to labor. Rather may the labor of today gain by granting freely to the stored-up labor of yesterday, which is capital, that fraction of the increased output from new industrial processes and machinery which is necessary to stimulate savings and thereby promote business enterprise.

The Industrial Revolution has brought special problems and difficulties that are pressing for solution—and that must be solved. But these problems and these difficulties are, nevertheless, only a few among many that humanity has struggled with or surmounted in the past. Back of the scant one hundred years during which modern industrial developments have dominated human activities, lie many centuries of continuous struggle for individual liberty. During these long years man might live free as a nomad, with all the penalties of nomadic

life. But if he chose to live with his fellows, in tribes or cities or organized nations, he paid the price of subjection to arbitrary authority in many forms. This authority might be that of the tribe and of ironclad tribal customs. It might be the authority of the church and of an organized priesthood. It might be the authority of kings, or of military despots. But, in whatever form it came, individual liberty was sacrificed or abridged.

These arbitrary restrictions of individual liberty were not, however, in all, or even in most, cases fundamentally blamable. Society could not exist without authority. Authority had to be. But men had not learned how to temper authority with the necessary restraints.

This, then, was the great problem with which humanity had struggled for centuries before the Industrial Revolution brought its new and special difficulties. How might an organized society exist without the abuse of power and without subservience on the part of the individual?

### THE ORIGINS OF AMERICAN GOVERNMENT

The culmination of this long struggle, and the greatest single step forward toward the solution of this century-old problem, came, perhaps, with the American Revolution and the establishment of our present form of government. Here, for the first time in history, a great people founded a nation upon the declaration that there were certain individual rights that must be preserved and upon the belief that society could develop to its fullest effectiveness only through the upbuilding of the powers and opportunities of the individual.

This conception of government was well expressed by Thomas Jefferson, in 1816, when he said:

"Our legislators are not sufficiently apprized of the rightful limits of their power; that their true office is to declare and enforce only our natural rights and duties, and to take none of them from us. No man has a natural right to commit aggression on the equal rights of another, and this is all from which the laws ought to restrain him; every man is under the natural duty of contributing to the necessities of the society, and this is all the laws should enforce on him; and, no man having the natural right to be the judge between himself and another, it is his natural duty to submit to the umpirage of an impartial third. When the laws have declared and enforced all this, they have fulfilled their functions, and the idea is quite unfounded that on entering into society we give up any natural right. The trial of every law by one of these texts would lessen much the labors of our legislators, and lighten equally our municipal codes."

This viewpoint was clearly that of other founders of our government besides Jefferson. Their fear was as great of the tyranny of popu-

<sup>\*</sup>Vol. III, p. 3, The Writings of Thomas Jefferson, New York, 1859.

lar majorities and of militant minorities as it was of the tyranny of princes and kings, and this fear found expression in the familiar passage from the Declaration of Independence: "We hold these truths to be self-evident, that all men are created equal, that they are endowed by their Creator with certain inalienable rights, that among these are life, liberty and the pursuit of happiness. That to secure these rights Governments are instituted among men, deriving their just power from the consent of the governed."

#### THE AUTOCRATIC IDEA

However, in opposition to the individualistic development of the American Government, there still persists in some quarters a belief in highly centralized power. The two significant modern examples of governments organized under this belief are both, curiously , enough, of German origin, one being the paternalistic autocracy of the pre-war German state, and the other the communistic autocracy of the present Bolshevist Government, which is based directly upon the theories of Karl Marx. In the one case, we are concerned with a state organized from the top of the social ladder and founded upon the idea of the divine right of kings. In the other case, we have an exactly similar conception of government, with the single difference that it is founded upon the idea that the ruling class should be chosen from the very bottom of the social ladder. Yet it is of little consequence which social group controls the governmental machine. The fundamental ideas are the same. Individual initiative and individual liberty are destroyed, and the only powers remaining are those of autocratic and, in the end, narrow-minded and egotistical bureaucracies.

One of the major causes of the Great War appears to have been the conviction of the German bureaucrats that they had developed so perfect a plan of government that a world that could not perceive, and willingly accept, its beauties and its advantages deserved to be warred upon as the penalty for its ignorance. Similarly, it is one of the basic teachings of the radical creed that communism must be initiated by establishing the most rigid kind of a dictatorship of the proletariat, and that this dictatorship must continue until human nature has been remade, if necessary, by force, and the beauties of the new plan are generally and unquestioningly accepted. Neither the true Bolshevist nor the true Prussian can ever understand, or hope to understand, that feeling of men educated in a real democracy which makes them sincerely prefer to be shot rather than to attain perfection under autocratic rule, whether this be of kings, or of bureaucracies, or of proletariats.\*

### THE NEED FOR COMPROMISE

As has previously been noted, the essential purpose of our own government, as conceived

\*In explanation of the relation between the teachings of Karl Marx and the present Russian communism, our socialistic critic of this chapter says:

"Today there is a fundamental cleavage in the socialist and communist movements as to the relations of the Marxian philosophy to Bolshevist tactics. On the one hand, such Russian leaders as Lenin and Trotsky declare that their tactics are directly in line with those advocated by Karl Marx, the father of so-called scientific socialism. On the other hand European Marxists such as Kautsky and such American socialists as Morris Hillquit (see "From Marx to Lenin") and Louis B. Boudin contend that Bolshevism is inconsistent with Marxism. Marx, they claim, held that socialism was not possible until a country had passed through a stage of developed capitalism. Russia, however, had hardly entered upon that stage at the time of the November revolution, but was in the lower stages of agricultural development. These Marxists, furthermore, contend that Marx thought of a 'proletarian dictatorship' in terms of a government representative of the 'overwhelming majority' of the population. Marxian so-cialists have generally condemned autocratic control of industry, and have declared that socialism was impossible without democratic management. The Bolshevists were of the opinion that, during the transition period, particularly during a period of civil and foreign wars, industrial authority should be centralized. They did not, however, advocate this as a permanent policy, and, since 1921, have done much to decentralize industrial control. The control originally proposed was a control by the most intelligent and militant minority of the industrial population, (according to Bolshevik concep-tions), rather than that by the 'slum proletariat,' and much stress was at times placed by Lenin and others on the importance of the technicians to the industrial machine. They claimed that their object in establishing a temporary dictatorship was not the perpetuation but the elimination of class rule.''

by its founders, is to protect individual rights and individual initiative. And, in opposition to this concept, the German idea of the state, whether in imperialistic or communistic form, tends inevitably toward what is, at the best, a paternalistic despotism of strongly organized and intrenched bureaucracies.

Yet no mistake could be greater than to allow the fear of radical excesses to check or prevent wholly, in this country, that natural development of cooperative effort which should take place—without sacrifice of individual liberties, without destruction of individual initiative, and without violence to fundamental instincts in human nature.

The highly individualistic state protects individual liberties and stimulates individual energy; and it is itself largely protected against great errors through the fact that its vitality lies in the many voluntary groupings of its citizens for industrial, social and political purposes and its growth and development come out of the consensus of the experience and the thought of these groups. Yet its centralized governmental agencies—its representative assemblies—are, almost from their very nature, incapable of successfully directing the administration of large public or semi-public enterprises.

The highly socialistic state, on the other hand, gains power of administration at the sac-

rifice of individual liberty and of individual energy and initiative—while at the same time it so centralizes its thought and its vital functions that it loses all independent life in its members, and after a brief display of abnormal vigor may decay as a whole, or go mad, as nations sometimes will, without power of recuperation from within.

If there were no possibility of compromise between these two extremes, the choice would be a hard one—on the one hand, individual liberty and individual initiative, but combined with these an inability to meet the growing demands of a complex civilization for administrative skill in public and semi-public affairs—on the other hand, a centralization of governmental power purchased at the price of individual subservience and loss of energy, and with the ever-present danger that the centralized power may run wild without balance or control.\*

#### THE POSSIBLE ANSWER

Between the advantages and disadvantages of the individualistic and socialistic forms of government it is hardly possible that a simple

<sup>\*</sup>Our socialistic critic objects to an assumption that all socialistic developments necessarily involve a bureaucratic centralization of authority. He says:

<sup>&</sup>quot;Socialism must not be confused with communism in the sense that this word was used prior to the Russian revolution, nor should the old communism be confused with the present

solution may be found. However, a hint at the ultimate answer may lie in the organization of the human body. Here there has developed, through long centuries of evolution, a natural

day Russian communism. Socialism implies a system of society under which the chief industries are collectively owned and democratically managed. It has often been defined as the public ownership and democratic management of the socially necessary means of production and distribution.' Under the system of socialism, as advocated by most American socialists, the chief and controlling industries would be owned collectively by the nation, the states and the municipalities, and managed democratically by representatives of the administrative officers, the rank and file of workers and the community-at-large. Outside of the publicly owned industries there would undoubtedly be a considerable number of industries owned by voluntary cooperative groups of consumers and producers, particularly in intellectual production and in agriculture, and a certain number of private enterprises, particularly in the handicraft industries. Socialists do not contemplate under social ownership the bureaucratic and political control found today in most governmental industries. The socialist favors the retention of private property in consumption goods.

"In primitive times a certain primitive communism was found, under which not only capital goods, but also consumption goods, were owned in common. Socialism, as technically understood, was impossible prior to the development of capitalism, and is regarded by socialists as the logical next step following developed capitalism. The communism in Russia does not advocate, as did the old communism, community in consumption goods. The schism at present existing between the socialist and the communist forces of the world has developed over tactics rather than ultimate ideals. The Russian communism has been defined as 'socialism now.' These communists urge that social ownership be ushered in by a small. militant minority of the industrial workers, operating through a soviet form of government. The socialists, on the other hand, direct their efforts to the conversion of the majority of the population, and regard independent political action, trade and industrial unionism, cooperation and education as the four roads leading to social ownership."

and effective balance between the brain and the other vital organs. The brain thinks, reasons and plans—but although it is faithfully served by the other vital organs, it has no control over their routine operations. Such control is exercised by separate special brains (or ganglia), each organized and equipped for its particular function—and the more important and vital this function is, the more complete is the control by the ganglion in charge, and the less direct is control by the central brain. The hand may lift involuntarily at a threatened blow, or may be raised at will; but no conscious effort of the mind can stop the beat of the heart. Yet the heart would be less, rather than more. truly the servant of the whole body if the mind could interfere with its operations.

So in the ultimate development of our national organization, if we should cling too closely to an extreme individualism, we might be in the position of a man whose heart beat according to its own fancy without regard to the real demands upon it, whose lungs filled and emptied with no regard for the work at hand, and whose digestive organs furnished sustenance or not as they felt inclined. In the reverse direction, if we should centralize power over the vital functions of trade and commerce and industry in our representative assemblies, we might be like a man who was compelled to order each heart beat and each breath by an

effort of the will. Between these two extremes there must ultimately be, in our national organization, as in our physical bodies, a rational compromise.

But we cannot hope to realize at once a final perfection in our national organization. In our present representative assemblies—in our state legislatures and in the Federal Congress—we have the conscious centers of our national life. while in our great corporations we have the beginnings, and in some cases almost the fully developed forms, of our national vital organs and their associated and controlling nerve cen-Both are adapted to their special purposes — representative assemblies organized for legislation, and, on the whole, truly responsive to the broader currents of popular thought, but lacking continuity of policy and incapable of quick decisions in emergencies-corporations, on the other hand, organized for administration and decision, manned by specialists of long training, and planning steadily for future growth along lines of well-established policy.

It is not to be expected that we could have, today, a perfect adjustment and adaptation of these agencies to our national needs. When our Government was established, modern industrial developments were just beginning to take form, and the time that has since elapsed is but a single swing of the pendulum as time is measured in the broad history of human

affairs. The further adjustments cannot take place overnight, but must come by successive small steps, guided always by an increasing knowledge of the facts and by that spirit of true progress which seeks always to save the things of the past that are sound, while developing new plans for the future.

Not only must this progress come gradually, but there must also be a clear recognition of the infinite gradations in the character of the public and semi-public services to be performed.

First come the primary functions of government itself—legislative, judicial, and public safety; then come public education and certain basic services, such as those of sanitation, water supply, and the maintenance of highways, as to which support by taxation, in whole or in part, is necessary and justified.

Following these come vital public utility services, such as those of transportation and communication, and the furnishing of light and power, and artificial and natural gas, all of which tend to take on the character of natural monopolies, but which, nevertheless, should be commercially self-supporting.

Next in order comes the supply of fuel, food, and certain primary articles of clothing. Here public interest is still very great, although the elements of natural monopoly are lacking.

While still further down the line we have the supply of semi-necessaries — automobiles, watches, etc.; and, finally, at the end of the series, comes the supply of pure luxuries, such as jewelry and silks.

## THE GRADATIONS IN REGULATION AND CONTROL

With a range of activities as wide as that just indicated, it is obvious that no single method of administration can properly apply. A detailed discussion of all of the gradations that may be developed between complete government ownership and operation, through various forms of modified and regulated corporate control, to unrestricted private ownership, is, however, beyond the scope of this volume. Certain definite suggestions may, nevertheless, be made as to the conditions that must be observed if a successful development of our national machinery is to take place. Of these the most important relate to the constructive purposes that may be served by private capital and the individual investor, even in a national organization that aims at a very large development of collective effort.

First of all, as to the great public utilities, the question of interest and dividend charges, and of the savings that might be made in this respect under complete public ownership, is of very minor consequence—general public belief to the contrary notwithstanding.

If the Government should buy the railroads for any fair sum that could conceivably be paid, and should issue its own bonds for the purchase price, the maximum annual saving that could be effected, as compared with the present interest and dividend payments of all the roads, would be less than 2% of the present charges for freight and passenger service. Furthermore, nothing in past experience gives any assurance that this small saving would not be much more than offset by the wastes that seem to be inseparable from governmental operation of complicated enterprises.

In the case of many of the public utilities, the existing capitalizations are so much below the real present values of the physical property that similar purchases by the Government would probably necessitate actual increases in rates due to added capital charges alone, without regard to further increases that might be made necessary through decreased efficiency of operation.

Programs for the development of collective effort, whether moderate or radical, put public utilities first in order of consideration; and the special significance of the preceding figures is the indication they afford that, whatever this consideration may be, the question of capital ownership is, in itself, of minor importance, and the controlling point of view must be that

of efficiency of operation and adequacy of service.

Similar conditions exist to a very large extent in connection with all of the agencies of production and distribution to which it has been proposed to apply a program of collective control. Out of the 32% of all family incomes that is derived from land and capital, probably one-half is derived from rural and residential property, leaving only 16% to be derived from those investments in public utilities, trade and industry that are most frequently the objects of socialistic concern.\*

#### WHERE THE REAL GAINS MAY BE MADE

This comparative unimportance of capital charges in the fields ordinarily proposed for the initial applications of collective control is not generally recognized. Official statistics are frequently quoted for groups of manufacturing

\*Our socialistic critic objects here to the assumption that the only saving possible under socialization is the difference between the interest and other charges on corporation securities and the corresponding charges on government bonds. He writes:

"Socialists agree with the uphelders of the present industrial system in their emphasis on the need of capital in the form of machinery, etc., and realize that under a system where capital is privately owned the individual capitalist will demand and secure a part of the social product. They are, furthermore, willing to admit that if the alternative is, on the one hand, the use of capital and the payment to the individual for that use, and, on the other, the non-use of capital, the former procedure, leading as it does to greater productivity, establishments which show wage payments amounting to only a third, or sometimes only a fifth, of the total value of the product. The usual assumption is that the entire difference between wages and the value of the product represents profits, and that wages could be doubled or trebled if profits were eliminated.

is the preferable. Their contention is, however, that the ownership of capital goods should gradually be transferred to the community; that social investment should gradually take the place of individual investment, at least in the development of large scale production; and that the income which now goes to individuals in the form of rent, interest and profit should accrue to the advantage of society-at-large and be used in increasing the return to the nation's producers, in improving the economic structure and in enriching the intellectual and aesthetic life of the people.

"Income from the ownership of property will thus gradually be eliminated and the primary source of income for all groups in the community with the exception of the child, the old, the sick, etc., will be that derived from intellectual or manual service. The socialists believe that society as a whole, with hundreds of statisticians at its command, with a comprehensive knowledge of the needs of the community and with the ability to coordinate industrial effort, can perform the function of saving and investing now performed by the individual capitalist more economically and wisely than at present. Social ownership and investment would also eliminate the necessity of

supporting certain groups in idleness."

In opposition to this view, there is a growing feeling, among many who have studied the problem of raising new capital for business enterprises, that such capital can be raised in any required amounts by providing means whereby the average worker may safely and conveniently invest in securities representing the country's major industries. The possibilities in such distribution of ownership appear to be almost unlimited, and there is a very real question whether this type of public ownership may not combine most of the advantages claimed for the socialistic plan, with the added advantage of developing the traits of thrift and foresight in the individual.

Yet the real facts are that the difference in question represents mainly payments for raw materials, coal, power, rent, taxes, etc., and that profits (including interest on borrowed money) are usually somewhat less than one-third of payrolls.

If this ratio of capital return to wages in industry were steadily rising there might be cause for concern. But the reverse appears to The total product of industry be the case. tends to rise steadily year by year at a rate more rapid than that of the increase in population. The shares of labor and capital in this product are both increasing; but the relative gain on the part of labor appears, in the long run, to be somewhat more rapid than that of capital. Much of this gradual gain appears to be due directly to the more efficient use of capital and to the lower rates of return necessary for successful financing in those industries that have been consolidated and reorganized along lines of maximum efficiency of operation.

So far, then, as the question of capital charges in production and distribution is concerned, the average man may reasonably hope for a gradual but steady improvement in his condition as the result of the natural trend toward greater stability of investment and the more efficient use of capital as the essential industries become more efficiently organized.

However, a much greater possibility for gain exists in connection with the opportunity for reducing the multiplicity of styles and designs of consumable goods that are advertised and sold.

Even in normal times, as any ordinary article moves from the factory, through the jobber and retailer to the ultimate consumer, the factory price about doubles. This doubling is not due, however, as is commonly believed, to high profits on the capital used in the process of distribution. About three-quarters of the additions to factory prices represent actual salaries and wages paid to employees of railways, trucking concerns, wholesale establishments, retail establishments, etc., and only one-fourth of the additions, in the average case, represents profits and interest on capital used. The greater portion of the increase in prices from the factory to the consumer is due to the large stocks that must be carried, to the time required by the salesman to induce the customer to make his choice, and to the losses that result from changes in styles and patterns.

Further very large savings could be made in the factory itself, if this multitude of styles and designs could be simplified to some reasonable extent. As to many classes of commodities, these savings have been estimated at fully 331-3%.

Action along these lines offers, therefore, perhaps the greatest single opportunity for an increase in the comforts and real wages of the average man; but it is very doubtful whether the beginnings can be made by legislation or regulation. If there is popular desire to effect these savings, the public will first have to educate itself to the value of simplification, and as the next step there must come a certain amount of voluntary effort through cooperative and consumers' associations. Only when these preliminary steps have been taken, and when there is definite evidence of a general desire on the part of the public to avoid extremes of style and design and to use simplified articles, will it be practicable, if at all, to supplement this voluntary action by legislation.

### THE FINAL PROBLEM

Back of developments similar to those that have just been discussed, lies the primary problem of conserving and utilizing, in our national organization, every source of energy, of growth, and of progress that human traits can supply. This organization, in its various parts, must take many forms. But whatever these forms may be, we can combine with them all necessary guarantees for human welfare and for equity in the distribution of the product.

Energy in production, furthermore, does not mean the over-driving of men or tools. It means skilled and stable management, foresighted planning, new inventions, and new methods, together with a smooth balance and lubrication of the whole industrial machine. And if this energy should be lost, there would be small comfort for the worker in any plan that increased his relative share in the total output, but so reduced the amount of that output that his final reward was less than before.

Efficiency of administrative organization can, however, only be secured in corporate form. To quote the author of the so-called "Plumb plan"—"There has never yet been devised a political government that could successfully administer an industry." Yet in the development of these special corporate forms, as in all other human affairs, it will be necessary to avoid extremes; and no greater mistake could be made than to eliminate, or even too greatly to restrict, the influence of the investor.

It has been well said that, of all the elements contributing to industrial activity, there is none greater or more valuable and constructive than the element of foresight—and no method of securing this element of foresight has ever been devised except that of permitting some individual to put hard-earned dollars into a business that he must thereafter nurse and develop and watch.

Workers come and go, executives change, consumers shift from market to market, what is everybody's business is nobody's business but back of every honestly earned dollar invested in legitimate business there is, permanently and for all time, some man to whom that dollar represents hard work, self-denial and provision for his family and his old age. Society cannot afford to eliminate, from the management of its great affairs, the qualities that these things represent. It would be as wise to tie all workers' hands, because some hands do violence, as it would be to deny to our industrial organization the services of the live dollar and the progressive investor because some dollars are not well or wisely used.

Here lies the great fallacy in the extreme plans for social change that are now proposed, and just as it may be only fair to credit the present Russian Government with altruistic motives, so also would it be fair to inscribe on thousands of newly erected Russian tombstones the words—

"Died of an overdose of theories and a shortage of bread."

# CHAPTER III

## PRODUCTION AND DISTRIBUTION

## THE GOING MACHINE

HE preceding chapters of this volume have described the development of our present social and industrial organization from its crude beginnings, and have indicated the forms that this organization may assume, if we move forward along sane lines and avoid the pitfalls that lie at both extremes of economic and political theory.

But our primary interest is not in the bare, cold structure of the economic system. Our much more real concern is with the movements and activities of the whole producing and distributing mechanism that, in the end, through its efficiency or inefficiency of operation, must largely determine our individual fortunes and the comfort, or lack of comfort, with which we live. We may be mildly interested in knowing what the 1950 model of industrial machine is to be, but it is of downright serious importance to have a full gas tank and oil reservoir and all cylinders firing on this year's model. Furthermore, to continue the parallel, we are not half so much concerned with

whether the machine will make 60 miles an hour on a level stretch, as we are with its ability to keep going uphill and downhill at an ordinary road speed and to come home at night under its own power.

On the whole, the present economic machine does reasonably well when it is operating with full energy, but its variations in speed—its periodical partial breakdowns—are of so vital consequence that they constitute the most serious of immediate problems.

It will not do, however, to condemn the whole machine because of a dirty spark plug or a choked gasoline feed, or to hammer blindly at the mechanism in the hope that a chance blow or turn of the wrench will remedy the difficulty. If we do not know how the present machine operates and how to adjust it and keep it in good running order, there is small chance that we shall do better with another machine or a new model.

Furthermore, we can foresee no practicable changes in our present economic organization that can seriously alter the general principles of its operation. There will always be buying and selling. Some men will always work for wages, while others will take risks and build up new enterprises. Money, in some form, will always be used as a common measure of values; and, in some form, there will always be borrowings and lendings, the payment of interest and

rents, and the expansion and contraction of banking credits. With this fundamental permanency in mechanism assured, how, then, does the present industrial system operate and what are the necessary adjustments that should be made?

#### THE FLOW OF INCOME AND EXPENDITURE

In attempting to picture the round flow of production, distribution, and consumption, it is helpful to separate the various conditions that may exist and the operations that may take place.

The most tangible thing with which we can deal in the economic flow is the fact that, during times of settled business, the sum of all individual incomes is always substantially equal to the sum of all individual expenditures.

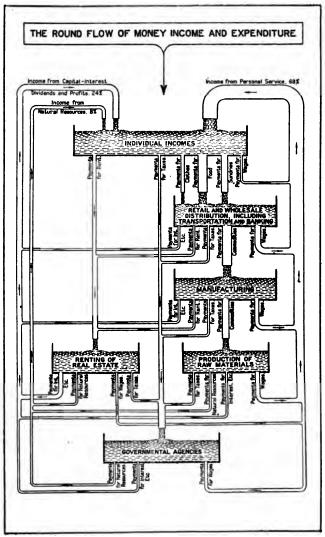
Expenditures may take many forms. They may cover necessary living costs, or proper luxuries, or wasteful extravagance. They may involve the accumulation of property in buildings, or in the stocks and bonds which represent the ownership of business and industrial enterprises. Or they may take the form of bank deposits or loans to individuals, in which case the expenditure is indirect rather than direct. But whether saved or wasted, or spent for necessary living costs, practically every dollar of income received goes very promptly back again into circulation and in turn very

promptly becomes once more the income of some individual.

This circulation of money is the blood flow of the economic organization, and the driving power of this organization—its heart energy is the desire of each man to make a place for himself in the world and to build up comfort for himself and his dependents.

The way in which the round flow of money income and money expenditure takes place is illustrated by the diagram on the following page. The various pipes in this diagram are drawn only in approximate proportion to the actual money flow, and many details are necessarily omitted. Nevertheless, the picture, as a whole, gives a correct general idea of the transactions that take place.

At the top of the diagram the total of all individual incomes flows in through pipes representing the three primary factors in all productive operations. Personal service, which includes salaries and wages, with an allowance for the equivalent wages of farmers, small storekeepers and others who work for themselves, contributes 68% of the total flow. Return on capital, which includes interest and dividends and an allowance for money invested in farm machinery, small shops, etc., accounts for 24% of the total. The balance of 8% represents the rent of urban and rural land and other natural resources.



plains the way in which new workers, whether native born or immigrants, are absorbed into industry.

Each day in the United States there is a net gain of over 2,000 new workers—most of them native born young men and women newly grown to working age. No matter how settled the business of the country may be, there are always slight variations in demand. Some industries and occupations show a slight shortage of workers, while others have a slight surplus. The occupations that are slightly oversupplied are usually slow to lay off trained workers, but those that are under-supplied are quick to hire the newcomers in the working field. The result is that the newcomers are They at once begin to spend their earnings and thus increase the demand upon the occupations that were previously over-manned -and so the balance is restored, and full employment is maintained, not only for the newcomers, but also for those who previously were in danger of being laid off.

An exactly similar operation takes place when the workers available are not newcomers, but are those released from previous employment by the introduction of automatic machinery or other improvements in processes and methods. If the number of workers so released at any one time or in any one locality is not too great, they are absorbed into other

employments in the same manner as an equal number of new workers, but with the added advantage to all workers and consumers that the prices of the commodities which they previously were engaged in producing may, and in time quite certainly will, be reduced as the result of the economies effected.

With normal business activity and with natural resources ample for a growing population, these processes may continue indefinitely. In theory, each employer, as he takes on new workers, slightly increases his borrowings and thereby increases the volume of money in circulation in proportion to the increase in his payrolls. This may not be true in practice, for individual cases, but it is true in the aggregate; and with a fixed level of prices the volume of bank deposits and bank loans should increase steadily from year to year in close proportion to the increase in payrolls and in the total of individual incomes.

## THE GROWTH OF INDUSTRIAL MACHINERY

With this steady growth in business and industrial activity there must be, for continued progress, an even more rapid growth in the machinery of industry.

The skilled worker's wage, in this country, will buy today over three times as much wheat

flour as it would in the year 1855. Yet he is hardly more capable and works shorter hours than his predecessor of two generations ago. The difference lies almost wholly in the mechanical and scientific developments that have taken place—better railways, and greater railway mileage, telephones and telegraphs, improved agricultural machinery, and new industrial processes of a thousand kinds.

Political parties may come and go. Theories of reform may wax and wane. But day by day, in thousands of laboratories, in the minds of thousands of inventors, in the workshops of thousands of mills and factories, these constant additions to human productivity go on.

Careful studies have shown that in the United States the annual production of useful goods increases with remarkable steadiness at a rate between 3 and 4% per annum—while the population increases at the rate of only 2%.

High interest rates, shortened working hours, and the losses in productive efficiency that have come as the aftermath of the war, may for a time check this progress, and may retard the normal steady increase in real wages, as measured by purchasing power. Increased governmental expenditures will also have their influence. In spite of all theories and devices to the contrary, the bulk of the burden of taxation falls in the end upon con-

sumption, and shows up finally in higher prices, higher rents, and higher cost of living. During periods of growing taxation increases in real wages may not, therefore, be revealed by the usual indices of purchasing power. These may stand still or decline, while the added national productivity is absorbed in improved highways, education, and sanitation, in enlarged national armaments and military expenditures, and in many other forms of productive and unproductive governmental activity.

Unrecognized changes in the character of goods and services are a further factor tending to obscure the normal increase in real wages. The quart of milk which is Pasteurized and delivered in a sanitary glass jar is not the same article as the quart of milk, plus assorted bacteria, that used to be ladled from the farmer's milk can. The yeast cake ordered by telephone and delivered by automobile is a different yeast cake from that which used to come home in the housewife's market basket. Housing laws have made five rooms in a modern tenement a different thing from five rooms in the old-style rookery.

Yet, in spite of all these influences tending to hold back both actual and apparent increases in real wages, the normal annual gain in productive efficiency is so great that it must reassert itself sooner or later in tangible improvements in standards of living.

Closely related to this steady gain in human comfort lies the often debated, but fundamentally sound, theory that labor, under conditions of free competition, is the "residuary legatee" and, as such, receives, in the end, all the gains from new machinery except a living wage for the new capital invested.

The basis for this theory is simple. Each manufacturer in a competitive field who puts in a new machine, or introduces a new process, does so because he expects to make a saving greater than the interest charges on his added investment. He hopes to retain, and for a time may retain, the entire excess as his own added profit. But, in the end, his competitors will imitate him, and, when this imitation takes place, prices will be reduced to a point where the new investment earns only a normal rate of return and the balance of the gain is passed along to the consuming public.\*

The most vital interest of the ordinary worker, and of every consumer, lies in maintaining this steady building up of productive

\*This theory is often attacked by the labor unionist and socialist on the ground that a large portion of the gain from new processes and machinery is absorbed in monopoly profits. In such cases it is claimed that "labor" gets the "living wage"—or less—and that capital is the "residuary legatee." It would be very difficult to determine just what proportion of the total national income is absorbed in monopoly

profits—but it is hardly probable that more than one-third of

machinery. It happens that this development has taken place in the past without increasing the relative share of capital in the output. But it is of comparatively little importance what these relative shares may be, provided only the purchasing power of the worker's wages steadily increases.

Two things, in particular, are necessary for a steady increase in productive industrial equipment. There must be general confidence that investments once made will be protected and will be allowed a "living wage," and there must be a continuous large volume of savings available for investment. With these requirements met, interest rates will be low, the additions to industrial equipment will be large, and the increases in productivity and in real wages will be rapid.

Before the war, the greater part of large individual incomes and of the surplus earnings

the output of the highly organized industries is sold at a monopoly profit, or that such profits represent an average addition of more than one-half to normal competitive profits. On this basis monopoly profits in the highly organized industries of the United States at the outside might amount to one-seventh of the total profits in such industries, or to about 2% of the national income, as compared with the 68 to 70% of the national income which is paid to labor. Unless these figures are very greatly in error, or the percentage of monopoly profit is very rapidly increasing, it would appear that the theory of labor as the residuary legatee is substantially sound for conditions as they now exist in the United States.

of business enterprises was regularly reinvested in productive machinery and equipment. Such harm as there may have been in large individual and corporate incomes lay not in the incomes themselves, and certainly not in their reinvestment. It lay only in occasional conspicuous examples of monopoly prices and wasteful living, and in occasional abuses of the power which large incomes and large fortunes created.

Today, with heavy personal taxes amounting to 60% of the larger incomes, and with other taxes absorbing a large portion of the surplus earnings of business enterprises, the normal flow of investment money is diverted from industry and passes into the hands of governmental agencies. From such agencies. a part may be returned to investors through payments of interest and repayments of principal on government bonds, but a much greater part ceases to be available for investment purposes. The result has been to increase greatly the cost of raising new money for industry and business, and to raise interest rates, in the judgment of the best observers, to a semipermanent plane from 1 to 2% above the prewar level. This not only transfers back to the ultimate consumer in higher prices much of the tax originally imposed upon individual and corporate incomes, but has the further great

disadvantage that it tends seriously to throttle normal industrial development.\*

Industrial progress and the welfare of every individual demand that at least 10% of our national effort shall be expended each year in new buildings—residences, offices and factories—in added public utility facilities, in added stocks of goods, and in added factory equipment. This need is a primary one, and no theory of government, of industrial organization, or of taxation is, or can be, sound that does not provide this continuous flow of new investment or that increases seriously the cost of maintaining it.

If certain limbs in the form of large incomes are to be lopped off or pruned from our economic tree, it is quite essential to be sure that we are not sitting on these limbs before we begin to wield the saw.

## THE BUSINESS CYCLE

In the preceding pages, the discussion has been confined to the normal flow of income and

\*Our socialistic critic says: "If the money thus collected in taxes were used primarily in the building of needed public works, in the development of industries of a public character, and of the educational and artistic resources of the country, instead of for military purposes, as is largely the case at present, such taxation would be a boon, not a hindrance to the industrial and social welfare of the people. If investment in harmful and comparatively useless commodities was eliminated, the present volume of investment would suffice to produce vastly more necessities and comforts for the people than at present."

expenditure and to the underlying steady increase in productive efficiency which is the most hopeful feature of our economic system. It is, however, a rare thing for business activity to continue at any given level, or at any steady rate of increase, for a long period. The volume of business and of production grows from year to year, not steadily, but in a series of spurts, each of which is followed by a check or decline. These alternations of activity and depression constitute what is known as the business cycle.

In its details each business cycle probably will always differ from every other. Yet in certain elements practically all cycles are alike.

If we begin with a period of depression, we find merchants reducing stocks, bank loans being contracted, the weaker and less efficient business enterprises forced to the wall, prices dropping, and much labor unemployed. Construction activity and new business ventures are also at a low ebb. It is theoretically possible for business to continue at this low level indefinitely. Low incomes result in low expenditures, and low expenditures in turn make low incomes.

But, in practice, there are several things which always operate to bring about a business revival. A certain considerable amount of money is always being saved by thrifty persons, even during the worst of a business depression, and these savings create a growing pressure for an outlet in new enterprises and business expansion. Much construction work that has been checked by high prices during the preceding boom is always awaiting a favorable moment—a moment of low prices for material, low labor costs, and low interest rates—for a fresh start. Business men, generally, are always estimating price trends and will place orders for larger supplies of goods and for longer periods the moment they feel that the liquidation is complete and that prices are due to increase rather than to make further declines.

Sooner or later, therefore, the vicious circle of low income and low expenditure is broken. Bank balances are drawn upon, new loans are made, and each day's expenditure is greater than the income of the day before.

This process is cumulative. Merchants, who have delayed their purchases until they find prices on the up grade, buy liberally at these higher prices to avoid paying still more. The construction work begun by a few far sighted investors is supplemented by perhaps an even larger volume of construction—the building of new telephone lines, the buying of new railroad cars, and the extension of industrial plants—arising directly out of the increased business activity itself.

All of these operations involve a greater or lesser recourse to the banks for loans. Bank reserves begin to be inadequate, and interest rates rise.

By this time, prices have also risen very considerably; labor has become scarce and high priced, and labor unrest develops; the efficiency of the individual worker falls; the cost of new construction work becomes prohibitive for purposes of long term investments; business profits decline; losses increase; and a general feeling arises that the boom has been overdone and that a reaction is at hand. This stage in the business cycle is usually marked by a break in the stock market, which is intensified by the specially high interest rates demanded on loans for speculative purposes.

However, the existence of large amounts of uncompleted construction work and of heavy unfilled orders at factories maintains business activity for several months after the slump in the stock market. Construction work then begins to fall off rapidly. Retail merchants, seeing poor business ahead, reduce stocks and place few new orders. This action falls with cumulative effect on jobbers and manufacturers. Prices fall rapidly, and failures and unemployment increase.

Finally when this rapid downward trend has continued for perhaps six months, banking

conditions gradually improve, interest rates decline, the feeling arises once more that a favorable time is at hand for new construction work to be undertaken and for long term contracts for goods and supplies to be made; and the cycle is again repeated. This whole sequence is pictured graphically in the chart on the next page.

#### CREDIT EXPANSION AND CONTRACTION

Closely tied into the business cycle is the question of increases and decreases in bank credits.

In the days before modern banking facilities had been devised, a period of business depression was also a period when actual coin was hoarded up; while, in the reverse direction, a period of business expansion was one when hoarded money was withdrawn from its hiding places and put into circulation through loans to or investments in new business ventures.

Today actual coin plays a minor part in business transactions. About 85% of all payments are made by checks or bank drafts and only 15% are made in bank notes or other forms of currency. The real money of present days consists, therefore, mainly of demand deposits in banks. These deposits, in turn, represent only in small part coin or currency paid into the banks by depositors. They represent, in the main, bank checks and drafts

#### Normal 2. The volume of business low. 5. Merchandise stecks reduced. sharings of both producers IV. Depression Breads Prosperity. 1. Credit strain is reduced. requirements only, wage tall, efficiency increases straightened aut, intere 3. Prices and cost of doing buying for immediate and consumers' goods gradually accumulates DEPRESSION 8. Credit entanglements business decline. 4. Cost of cunstruction declines. THE FORCES OF THE BUSINESS CYCLE crisis or parte televra. restricted, waste of business dermes. LIGUIDATION III. Uquidedies and Crisis. 1. Profits decline. business decreases market at reduced 3. Retrenchment bear general, unameny 4. Liquidation tereson 5. Prices decline men 7. Failures intra 2. Gauds forced on prices, buyer and cumulans. ment grown 6. Credit strain rapidly Prosperity Contains Scode of Depression Labor fully employed at high wages. 2. Efficiency of labor and management 5. Stocks of goods become large and 8. Creditors begin to press for payment. enough to maintain profit margins. 3. Cost of doing business increases. 6. Investment construction falls off. 4. Selling prices increase, but not PROSPERITY 7. Tension in the money market markets are everbought. increases d. Lew raw material, labor, and interest 5. Prospect of rising markets stimulates . Volume of general business increases. c. Labor and management efficient f. Accumulated shortage of goods. The Cumulation of Presperity. Cenditions at beginning of reviral. 2. Volume of construction increases. 2. Favorable outlook for investment a. Considerable unemployment. b. Small volume of business. Diffusion and cumulation. REVIVAL e. Debts liquidated. forward buying. construction. costs Normal 78

which have been turned in by depositors for collection.

It is this characteristic of bank deposits which explains the manner in which deposits and bank loans rise and fall in substantially equal amounts. A bank loan is almost invariably deposited to the borrower's account at the bank where the loan is made. This deposit is then withdrawn through checks which are mailed to creditors of the original borrower. These creditors in turn promptly deposit the checks to their own accounts, so that any loan made at a bank will ordinarily show up very promptly in bank statements as an equivalent increase in demand deposits. In the reverse direction, reductions in outstanding loans are almost invariably made by means of checks drawn against demand deposits, which therefore show a decrease corresponding very exactly to the decrease in outstanding loans.

## THE QUANTITY THEORY OF MONEY

As a result of these relations, the volume of money in circulation (counting both checks and currency as money) is very closely dependent on the volume of outstanding bank loans, and an increase in such loans has an effect equivalent to an equal increase in the issues of bank notes.

The quantity theory of money is frequently misinterpreted. When reduced to its simplest terms, it amounts to nothing more than a statement of the obvious fact that the sum of all payments made in checks and currency is equal to the prices of the goods and services purchased, multiplied by the corresponding quanti-The debatable point in the theory is as to whether increases in prices cause increases in the volume of money and checks in circulation, or vice versa. The answer seems to be that either thing may happen. A sudden war demand for commodities may raise prices and thus compel an increase in bank loans and currency, or, in the reverse direction, an increase in credit facilities at a more rapid rate than the increase in commodity production, may cause prices to rise until a balance is reestablished.

In general, it is a fact, proven by experience, that any credit facilities that are available will in time be employed, so that over long periods it appears to be true that price levels are closely determined by the ratio of legally permissible bank credits, and, therefore, of possible checks and money in circulation, to the total output of goods and services.

In the ordinary business cycle the relations of bank credits and of money circulation to business activity and the general price and wage levels are comparatively simple. When a period of business expansion begins, the first signs of increasing activity are increases in purchases by retailers and jobbers, increases in bank loans, and increases in money circulation as shown by the rise in "bank clearings" and "debits to individual accounts." During the early stage in the boom, prices rise only moderately. Much labor is still unemployed and the first industrial movement is to put this labor back at work. The labor turnover is low and productive efficiency is high. The output of goods, therefore, increases practically in proportion to the increase in money circulation.

This process continues until, finally, there is full employment for labor with prices at a normal point, and with manufacturing and commercial profits on a high plane, owing to the fact that a full volume of business is being

done on an efficient basis.

If the business cycle could be held at this point, much would be gained. Competition should, and with reasonable public regulation quite surely would, hold prices and business profits at a reasonable point. Prices, in fact, should decline somewhat as the result of the efficiencies resulting from a steady output at a normal rate; while, at the same time, the working forces, except in occupations subject seasonal variations, would have stantially continuous employment at wage rates

which should steadily rise in purchasing power at the rate of perhaps 1% per annum.

Unfortunately, however, the expansion of business does not stop at this point. Commitments for supplies of goods and new construction are made by thousands of business men, each largely ignorant of what the others are doing. These commitments involve new bank loans, with corresponding increases in the volume of money in circulation. Employment and production are already at the maximum, with the result that the demand for goods and labor soon exceeds the possible supply.

At this point, then, there is an attempt by purchasers to buy with, say, \$1,100, in checks and currency, a total supply of goods that cannot exceed \$1,000 in amount at the old values. The immediate result is that prices begin to "sky rocket," and this is perhaps the first sign of the approaching business depression. The demand for workers exceeds the supply. Wage rates rise rapidly. Workers change from job to job, and efficiency is thereby greatly lowered. Strikes and labor unrest increase, and even the most conscientious of workers are affected in their output by the general disturbance of working conditions.

It is here, as previously noted, that the business cycle turns and a period of depression sets in.

Manufacturers and contractors find that contracts, which originally promised substantial profits, threaten now, because of rising costs of labor and materials, to result in heavy losses. Business confidence is shaken, credits are closely scrutinized, the further expansion of bank loans is checked, and an active contraction may take place.

# HOW MAY BUSINESS DEPRESSIONS BE PREVENTED?

When a business depression has actually begun, there is little that can be done but to wait. The preceding period of credit inflation has established false and impossible price standards. Business cannot go forward again in normal fashion until these false standards are torn down and true values are reestablished.

Every wage earner, every farmer, every merchant and manufacturer hopes some day to beat the law of supply and demand. In times of inflation they all become convinced that this law has finally been repealed, and that the glad time has come when each man may set his own price on his goods and his services, regardless of what the buyer may think or say.

When the inevitable crisis comes, the awakening is a hard one. Each group claims that the other groups should deflate first. There is much futile argument back and forth. But, in the end, normal price and wage relations are

once more established and business activity returns.

As with typhoid fever, so with business depressions, the only real cure lies in prevention. But the prevention is not simple. The only workable remedy appears to lie in a control and restriction of banking credits, at the point where proper business activity begins to run wild into inflation. Whether this control should be exercised wholly through the interest rates charged, or should take other forms, is an unsettled question. Furthermore, it is obvious that action in one country alone cannot be wholly effective in view of the ease with which investment money moves from country to country in response to variations in interest rates.

Yet, with all these difficulties in the way, the problem must be solved, for only when it has been solved will it be possible to secure that confidence in the foundations of our present economic structure which is neccessary before we can build it to greater usefulness.

And this matter of confidence must go further than a mere belief in principles of government. It must be built into the structure of every business and personal relationship. It must primarily be between man and man.

It would be small wonder if such confidence were lacking today in a world that has rapidly alternated between military discipline and communism, and between war wages and no jobs at all. But only when this man-to-man confidence is restored can we have a clear recognition of the fundamental facts which underlie all our problems of production and distribution.

- 1. That all material welfare depends upon high productivity.
- 2. That our present industrial system in the United States is the most efficient that the world has ever known.
- 3. That a ten-year normal increase in per capita production under our present system represents a greater gain for the worker than any that is possible as the result of any conceivable redistribution of profits.
- 4. That this normal increase in production can only go forward with ample investments in new productive equipment and with the assurance of a living wage for such investments.

# CHAPTER IV

## SOME PERTINENT STATISTICS

STATISTICS VERSUS "THE STATISTIC"

to the ordinary man, all the cheeriness and practical value of a night fog on the North Sea. What he is looking for is the statistic—a statistical lighthouse by which he may steer a course and reach an anchorage.

When, therefore, we seek to summarize the statistical evidence that lies back of the points of view previously presented in this volume, it will not do to submit long tables of figures or lengthy references to the census reports. The first necessity is to state clearly the problems involved, and the second is to associate with each problem the statistic which is most pertinent.

In some instances it will be found that there are no pertinent statistics; in others we may find an acceptable substitute for statistical evidence in simple lines of reasoning from common human experience; but in every case, if we are seeking to base our conclusions upon facts and dependable logic, rather than upon

opinion and prejudice, the least that we can do is to set up our problems in logical order side by side with the facts and lines of reason-

ing that apply.

Much, however, will depend upon the way in which we state the questions to which we wish statistical answers. The simpler and more definite each question can be made, the greater is the possibility of finding a simple and convincing answer and the less is the chance of being lost in a fog of figures and arguments.

## THE QUESTIONS TO BE ANSWERED

From a practical standpoint we are not directly concerned with whether we should have a socialistic or an individualistic government, or a compromise between the two. Mere names are of little account. Governments, and industrial and social organizations, based upon hereditary rights and privileges, obviously belong to a primitive stage in human history, and are not to be considered for the future. But beyond this we are only confusing the issue when we talk in terms of republics and democracies, or of individualism, socialism, and communism.

Men are what they are because of long centuries of evolution and human experience. They have certain instinctive desires, habits, and points of view, which can change only slowly from generation to generation. Our

future problem is not that of setting up a theoretically perfect economic plan, and of saying that men shall then adapt themselves to it. It is very certainly the opposite—that of studying the habits and instincts of human beings as they are, and of developing forms of political, social, and industrial organization which will operate most effectively in relation to such habits and instincts.

If we wish to risk a generalization we may put it in paradoxical form by saying that our economic system, under any sound development, will become more socialistic in the sense that we shall cooperate more effectively and recognize the public interest more fully with respect to many of our affairs, while at the same time we shall become increasingly individualistic in the sense that we shall more rigidly restrict our basic governmental machinery to the primary functions of government.\*

Whatever these developments may be, we do not need the recent failure of the great

\*One of the most serious dangers from the writer's standpoint is that the pressure for necessary and proper developments of governmental activity may lead to mistakes that may
be difficult, if not impossible, to remedy. Not only may
direct governmental authority be extended over undertakings
which should be subject, at the most, to a reasonable regulation,
but the tendency may be to impose the burdens of management, even as to proper undertakings, upon existing political
machinery which, from its very nature, is incapable of administering affairs requiring systematic planning and continuity

economic experiment in Russia to tell us that our future economic development must come gradually, step by step, out of the system we now have. On this basis, then, we may ask a series of questions to test the strength and the weakness of our present economic organization and to indicate in some measure the possibilities of improvement:

1. What is the trend of per capita physical production?

of policy. A further great danger is that, under the forms of governmental operation now in vogue, there may grow up great bodies of public employees who may be tempted, if not compelled, to bring concerted and, in the end, very harmful political pressure upon public officers and legislative bodies.

Our socialistic critic, while sharing some of the writer's fears as to political and bureaucratic management, still hopes for a rapid increase in socialized control and advocates the development of special forms of administrative organization as successors to those forms set up by "developed capitalism." After referring to the extent to which railroads and other public utilities, banking, forests, etc., have already come under state control, he quotes from "State and Municipal Enter-

prise," as follows:

""Even if no more were accomplished within the next thirty years than in bringing under the public administration in all countries of the civilized world, those industries and services which are today governmentally administered in one or other of the countries,' declares the Fabian Bureau, 'the aggregate volume of state and municipal capital and employment would be increased five or six fold.' Such an increase, without adding a single fresh industry or service to those already successfully nationalized or municipalized in one country or another, would probably bring into the direct employment of the national or local government an actual majority of the adult population; and along with the parallel expansion of the cooperative or voluntary association of consumers in their own sphere, would mean that probably three-fourths of all the world's industrial capital would be under collectivist or non-capitalist administration.'

- 2. What is the trend of real wages?
- 3. How is the national income distributed among individuals, and is income tending to become more or less concentrated in a few hands?
- 4. How is the national income distributed to labor (personal service), capital, and the owners of natural resources? What is the trend of such distribution?
- 5. What are the practicable possibilities with respect to securing a more uniform distribution of income among individuals?
- 6. What are the practicable possibilities with respect to increasing the share of "labor" in the total product?
- 7. What is the evidence as to waste and defects in our present economic system, and as to possible improvements?

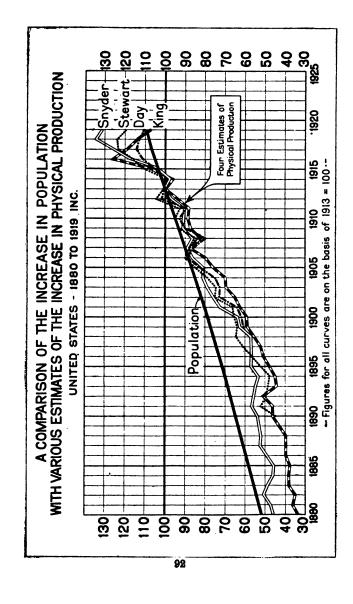
#### THE INCREASE IN PHYSICAL PRODUCTION

To the first of the preceding questions, the statistical answers are specially complete. Independent studies have been made by E. E. Day of Harvard, W. W. Stewart of Amherst, Carl Snyder of the Federal Reserve Bank of New York, and W. I. King, for varying periods from 1870 to date, all of which studies indicate an average annual increase of between 3% and

4% in the volume of essential commodities produced in the United States. These studies have recently been supplemented and corroborated by studies\* of the National Bureau of Economic Research with respect to the purchasing power of the national income. The results of these various investigations are shown in graphical form, on the chart which follows, in comparison with a line representing the increase in population. In each case the population or physical production in the year 1913 has been taken as 100 and the figures for other years have been plotted with relation to this base.

Roughly speaking, it appears from these studies that the physical volume of production nearly trebled from 1880 to 1919, while population only a little more than doubled. On a per capita basis this corresponds to an increase in physical production of somewhat more than one-third during the years involved. The bulk of this increase came in the period from 1894 to 1919, during which time per capita production increased at a rate somewhat in excess of 1% per annum.

<sup>\*</sup>See pages 79 and 80, Income in the United States, National Bureau of Economic Research, Inc., 474 West 24th Street, New York City, for the results of these studies and for detailed references to the other investigations mentioned. A recent revision of Mr. Snyder's index is, however, shown on the chart here presented.



#### THE INCREASE IN REAL WAGES

With this steady and substantial increase in per capita physical production, it is to be expected that real wages would increase, in spite of moderate changes that might take place in the distribution of the national income among individuals and among the factors in production—i. e., to labor (personal service), capital, and the owners of natural resources.

Such increases, as indicated by the increase in per capita production, should be at the rate of approximately 1% per annum. of increase is not great enough, however, to prevent the long term trend from being obscured from time to time by changes in price levels and by economic adjustments among occupations. These latter adjustments during one period of years may cause most of the general gain in productivity to accrue to farmers and agricultural workers, or to relatively unskilled workers, while during other periods they may work in the reverse direction to the advantage of miners or factory workers or clerical employees, or specially skilled occupations. For this reason, and because of the difficulty in establishing proper general indices of prices, wages, and cost of living, there arises the belief, ever so often, that the purchasing power of wages is steadily declining: and it is often possible, by selecting special cases for investigation, to collect figures which

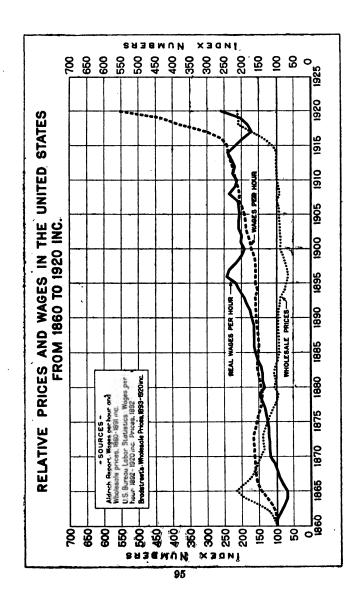
show that such a decline has taken place, temporarily at least, in some particular occupation or in some particular locality.

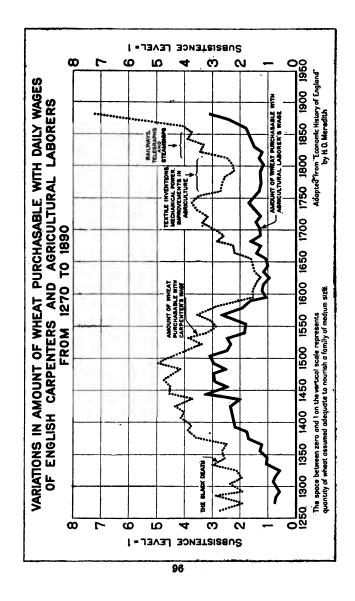
Our major concern is, however, with the long term trend of wages as a whole, and, as to this, there is, during the past 50 or 60 years, evidence of a reasonably continuous increase such as might be expected from the increase in per capita productivity. The first of the two charts which follow is based upon what are believed to be the best indices of hourly wages and prices\* available from year to year during the period indicated.

It is necessary to note on this first chart that there is, in general, a tendency for real wages to increase slowly or even decline during the early stages of a business revival, and to rise at an abnormal rate during the later stages of the business cycle. This is due to the tendency for wage rates both to rise and to fall more slowly than prices, and is largely independent of the long term trend in real wages.†

\*Wholesale rather than retail prices are used owing to the difficulty in securing any satisfactory general indices of retail prices. Wholesale prices fluctuate more than retail prices, but over long periods their trend is substantially the same.

†In estimating the long term trend of real wages it is necessary to disregard periods of rapid price changes, such as those from 1861 to 1879, from 1893 to 1900, and from 1916 to date. The true trend is much more definitely indicated by periods when prices are stable or are drifting steadily in one direction or the other. Figures for the year 1921, when available, may show a reversal of the uptrend in 1920, but such reversal will have only temporary significance owing to the present instability in price levels.





The figures just mentioned cover, however, what is relatively a very short period in economic history. For a longer view of the changes in real wages it is necessary to use European statistics. The second of the preceding charts\* shows the wages of English agricultural laborers and carpenters from 1270 to 1890 in terms of the amount of wheat required to sustain a normal family. It will be seen from this chart that, prior to the Industrial Revolution, there was no evidence of any continued uptrend in real wages. On the contrary the indications were all in favor of the theory that wages must periodically drop to the starvation level and remain there until the pressure of population had been relieved by war, famine, or pestilence.

The long period trends of real wages in France and Germany are similar in a general way to the English trends, although the increases following the Industrial Revolution appear to be less pronounced. However, American economic development is more closely related to English development than to that of other European countries, and can best be studied as a continuation of early English experience.

<sup>\*</sup>Adapted from Economic History of England by H. O. Meredith, pages 352-353. See also A History of Money and Prices, by Schoenhof, page 313.

## THE SIZE OF THE NATIONAL INCOME

When we combine the preceding quite dependable figures for the increases in per capita productivity with the less dependable, but still significant, figures for increases in real wages, it is evident that in recent years there has been a fundamentally sustained, although occasionally fluctuating, increase in the quantity of useful goods supplied to meet the needs of each individual in the American population.\*

A further check on this evidence is supplied by studies of the national income as a whole and of its distribution among individuals. Until very recently, the most thorough attempt at such a study for the United States was that of W. I. King.† During the past year, however, the research staff of the National Bureau of Economic Research, including Wesley C. Mitchell, W. I. King, F. R. Macauley, and O. W. Knauth, has completed and published, as Income in the United States, a very thorough study along these lines. This study was made in two separate parts. The first estimate was made by summing up the amount of all income

<sup>\*</sup>Labor unionists claim that much of this increase in productivity has been due to improvements in management and processes introduced under the pressure of advancing wage rates.

<sup>†</sup>The Wealth and Income of the People of the United States, by W. I. King.

at the points of origin, that is, by adding together, by industries and occupations, payments made for wages, salaries, and personal services as a whole, and payments made on account of interest, profits, and rents. The second estimate was made by summing up all personal incomes, including those below the income tax range, as well as those above, with proper adjustments for under-reporting, and so forth.

These two estimates were independently made, and when completed were found to be in very close agreement, with average yearly differences amounting to less than 5%.

The final estimates of the Bureau are given in the table\* which follows:

INCOME IN THE UNITED STATES

Year	Total Income in Billions	Income Per Capita in Actual Dollars	Income Per Capita in 1913 Dollars†
1909	\$28.8	\$319	<b>\$333</b>
1910	31.4	340	349
1911	31.2	333	338
1912	33.0	346	348
1913	34.4	354	354
1914	33.2	335	333
1915	36.0	358	350
1916	45.4	<b>44</b> 6 .	400
1917	53.9	523	396
1918	61.0	586	372

<sup>\*</sup>Income in the United States, pages 64, 68 and 76.

<sup>†</sup>This column indicates purchasing power per capita in terms of dollars having the purchasing power that obtained in 1913.

# THE DISTRIBUTION OF THE NATIONAL INCOME AMONG INDIVIDUALS

If we accept the foregoing figures as to the size of the national income, in total and per capita of the population, the next question is as to the manner in which this income is distributed among individuals. Here we have two major points of view, first as to the present distribution, and, second, as to the trend toward increasing or decreasing concentration in a few hands.

As to the present distribution the most dependable figures are, again, those of the National Bureau of Economic Research for the year 1918. During this year, excluding 2,-500,000 soldiers, sailors and marines, there were 37,569,000 persons in the United States having personal incomes. The average income per person was \$1.543. About one income receiver in each 148 had an income of \$10,000 a year or more. These larger incomes amounted in all to about \$6,936,000,000, or 12% of the total income of all persons. If these larger incomes were all leveled down to the \$10.000 figure, the total reduction would amount to about 8% of the national income.

All of the preceding figures, it should be noted, exclude the incomes of the 2,500,000 men engaged in military service during 1918. Furthermore, they include no allowance for

deductions on account of personal income taxes, which in 1918 ranged from about 1% of incomes between \$1,000 and \$3,000 to about 8% of incomes between \$10,000 and \$25,000, and up to nearly 65% of incomes of \$1,000,000 and over. The following table gives the basic data from which the computations in the preceding paragraph were made.

#### A CONDENSED SUMMARY OF THE DISTRIBUTION OF PERSONAL INCOMES IN 1918

(Excluding 2,500,000 soldiers, sailors, and marines.)

Income Class	Number of Persons	Amount of Income
Under Zero	200,000	<b>\$125,000,000*</b>
0-\$ 500	1,827,554	685,287,806
500- 1,000	12,530,670	9,818,678,617
1,000- 1,500	12,498,120	15,295,790,534
1,500- 2,000	5,222,067	8,917,648,335
2,000- 3,000	3,065,024	7,314,412,994
3,000- 5,000	1,383,167	5,174,090,777
5,000- 10,000	587,824	3,937,183,313
10,000- 25,000	192,062	2,808,290,063
25,000- 50,000	41,119	1,398,785,687
50,000- 100,000	14,011	951,529,576
100,000- 200,000	4,945	671,565,821
200,000- 500,000	1,976	570,019,200
500,000- 1,000,000	369	220,120,399
1,000,000 and over	152	316,319,219
Total	37,569,060	<b>\$57,954,722,341</b>

A supplemental viewpoint with respect to income distribution relates to salaries and wages

<sup>\*</sup>This negative figure represents the speculative and business losses of certain individuals through failures, etc.

only. For the large organized industries, including mining, manufacturing, and land transportation, during the period from 1909 to 1918 inclusive, manual workers and clerical employees received from 91.4% to 93.0% of total payrolls, while the percentage paid for salaries of officials ranged from 7.0% to 8.6%, the average being 7.7%\*. This classification is, of course, a very rough one, and many so-called officials are undoubtedly little more than clerical workers, foremen, or superintendents, at rather moderate salaries.

A more direct test of the relative importance of salaries of officials is obtained by computing the effect of eliminating all salaries above a certain maximum, or of limiting salaries to a determined maximum. For the Class I railroads of the U.S. in 1919, which operated 233,-808 miles of line, the total salaries of division and general officers, receiving \$3,000 per annum and upward, amounted to only \$46,783,-275, as compared with a total payroll of \$2,-828,014,440. The higher railroad salaries for this group of roads amounted, therefore, to only a little more than  $1\frac{1}{2}$ % of the payrolls. For the Bell Telephone System in the U.S., a limitation of all salaries to a maximum of \$5,000 a year, in 1920, would have brought about a reduction in such higher salaries sufficient only to permit an increase of 22 cents per week in the salaries of the lower paid employees

<sup>\*</sup>Income in the United States, page 99.

if the savings were equally divided. Somewhat similar conditions undoubtedly hold true for the larger manufacturing and commercial organizations; although, on the other hand, there are many small enterprises in which a few large salaries make up a large proportion of the total disbursements for salaries and wages.

The second major viewpoint in connection with income distribution is with respect to the tendency toward an increasing or a decreasing concentration of the national income in a few hands. As to this point, there are no direct statistics available covering long periods, although it is obvious that in very recent years both inheritance taxes and personal income taxes have operated to cause a decreasing, rather than an increasing, concentration, so far as sums actually available for personal expenditure are concerned.

# THE DISTRIBUTION OF THE NATIONAL INCOME BETWEEN FACTORS IN PRODUCTION

A study of the reports of the Federal Income Tax Bureau brings out very clearly the fact that large incomes are almost wholly derived from return on capital and rents of natural resources. For example, in the year 1919, only 15.4% of incomes between \$100,000 and \$150,000 was derived from salaries and wages.

In previous chapters, it has been stated that approximately 68% of the national income was

received for salaries, wages, and personal service, about 24% for return on capital, and about 8% for rents of natural resources. These figures represent the writer's personal estimate, based upon certain assumptions as to the percentages of house rents that are assignable to return on capital and to land rents, combined with other figures as to the distribution of the value product of all classes of business undertakings between wages and salaries, and rents and other returns on property. This estimate is, however, very well substantiated by the following table taken from Page 97 of Income in the United States. "Wages and salaries" includes all pensions, compensation for accidents, and the like. "Management and property" includes rentals, royalties, interest, and dividends. "Net value product" does not include raw materials, supplies, and services received from other industries.

DIVISION OF COMBINED NET VALUE PRODUCT OF MINES, FACTORIES, AND LAND TRANSPORTA-TION BETWEEN EARNINGS OF EMPLOYEES AND RETURNS FOR MANAGEMENT AND THE USE OF PROPERTY

# 1909-1918

Millions of Dollars

Year	Wages and Salaries	Management and Property	Wages and Salaries	Management and Property
1909	<b>\$ 6,481</b>	\$2,950	68.7	31.3
1910	7,156	3,250	68.8	31.2
1911	7,287	2,791	72.8	27.7
1912	7,993	3,169	71.6	28.4
1913	8,651	3,359	72.0	28.0

Per Cent.

1914	7,947	2,816	73.8	26.2
1915	8,722	3,470	71.5	28.5
1916	11,630	5,810	66.7	33.3
1917	14,375	6,502	68.9	31.1
1918	17,472	5.124	77.8	22.7

In the above table, it should be noted that undistributed corporate surpluses are counted as part of the payments to management and property, and also that only partial allowance is made for the heavy losses to management and property that occur in connection with the failure and liquidation of many concerns.

It is obvious that, if anything, the recent trend has been toward increasing the share of labor in the product of industry, and, as indicated in previous chapters, there is some fragmentary general evidence of a long term trend toward a decrease in the share of capital. However, the disturbances brought about by the war have been too great to make the recent trend particularly significant; and there is. furthermore, no reliable single set of figures from which a long term trend can be directly An indirect approach to the determined. problem may, nevertheless, be made by comparing the annual increases in per capita product with the annual increases in real wages, as indicated on previous charts. This comparison tends to show that the two items are increasing from year to year at about the same rate. This could not be the case if the percentage of the total product paid for the use of capital and the rent of natural resources was either increasing or decreasing at a rapid rate.

## CAN THE SHARE OF LABOR BE INCREASED?

If, then, it is assumed that the present tendency is for the share of "labor" in the national product to remain relatively fixed or to increase very gradually, the question still arises as to whether there are not practicable ways to increase this share, and thus to secure a greater immediate equality of distribution of income among individuals. Statistical evidence on this point is very difficult to obtain or present. is necessary, in any case, to emphasize the word "practicable." for the reason that it might be very easy to set up plans which would increase the share of labor in the product, but would decrease the total product by such amount as to leave labor worse off than before.

There are, however, two indirect ways through which an approach to an answer to this question may be obtained.

The first relates to the necessity for a volume of savings in the United States amounting, annually, to from 10% to 16% of the national income. No definite and convincing statistical studies along this line have yet been published, although preliminary studies indicate that 16%

is nearer to the facts than 10%. A simple check on this percentage is obtained by assuming that the physical wealth of the country must increase approximately at the same rate as the volume of physical production, that is, at a rate between 3% and 4% per annum. The physical wealth\* of the country (excluding land) may be valued at about four times the annual national income, and a 3% or 4% annual addition to this wealth would require that from 12% to 16% be saved out of each year's income.

The application of the preceding figures to the problem of a possible increase in the share of labor is this—that these savings must be provided if economic progress is to continue; that the bulk of new capital, today, is provided by the reinvestment of interest, dividends and rents; and that, if "labor" should take over, by some process, the entire profits of property and management in the highly organized industries, this sum+ of from five to six billion dollars a year would, very largely or wholly, have to be reinvested by "labor," for its own self-protection, in new productive machinery. change would, therefore, result primarily in a redistribution of wealth and ownership, rather than an improvement in standards of living.

<sup>\*</sup>Estimated from figures on page 716, Statistical Abstract of the U. S., 1920, published by Bureau of Foreign and Domestic Commerce.

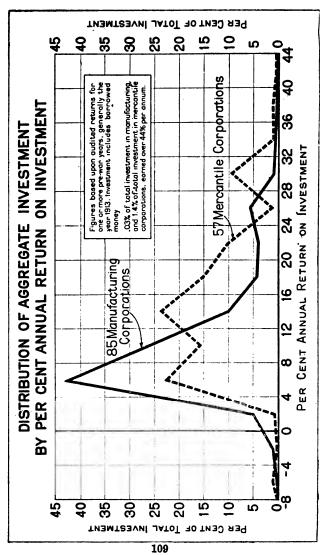
<sup>†</sup>Income in the United States, page 97.

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A second indirect approach to the problem of a greater equalization of incomes is through consideration of the actual profits in trade and industry. Here there is a very live conflict of statistics and statisticians. The ordinary view of business profits is illustrated by the chart on the following page which is based (through the selection of concerns doing a strictly competitive business) upon what is probably the most exact study\* yet made of profits in a typical group of manufacturing and mercantile establishments, the concerns in question having been chosen at random from among those whose accounts had been audited by a large firm of public accountants. If these figures are taken at their face value, it would appear that, while the marginal or "price fixing" concerns earn only simple interest on their investment, the average return on all of the invested capital is between 13% and 14%.

If these average earnings are correct, there may be ground for feeling that some further distribution should be made to "labor." But many practical business men refuse to accept such figures. They claim that a study of "going concerns" is meaningless and misleading, and that, if all the legitimate ventures in any competitive industry were followed through from birth to death, with full account taken of

<sup>\*</sup>J. E. Sterrett, American Economic Review, March, 1916.



all gains and losses, the average earnings on the invested money would very slightly, if at all, exceed the going rate of interest.

### EFFICIENCY AND WASTE

In presenting these and other statistics, it is not to be expected that the resulting picture will be clear and distinct in every line and angle. Yet out of the whole there may properly grow an impression of an economic organization that is imperfect in a thousand ways, and yet gains slowly in efficiency as the years go by—that needs readjustment and strengthening in many of its parts, and yet can not safely be torn down or suddenly replaced in any of its major elements.\*

\*Socialists and the more radical labor unionists, even when admitting the increasing productivity of the present system, lay much stress on the demand of the ordinary workers for an increased share in the control of industry. This feeling is voiced by our socialist critic who says:

"As the principal movement for freedom in the eighteenth and nineteenth centuries was that for democratizing the political machinery, so the great forward looking movement among the masses of today is that for the democratizing of industry."

He claims, in addition, that the present economic system has broken down in Europe and calls attention to "the fact that the 24,000,000 members of the International Federation of Trade Unions in Europe—which exclude the more radical unions of the Moscow Trade Union International—have gone on record in favor of the social ownership of land and capital."

It is, however, the writer's impression, confirmed to some extent by conversations with British labor leaders, that much of the European demand for a radical reorganization of industry springs unconsciously from class distinctions, traditions of family control, etc., which tend to prevent many specially capable workers from securing advancement to the more responsible positions in management. There is little evidence that a similar demand exists in American business organizations having well developed merit systems for promotion from the ranks.

This picture as to the combined strength and weakness of our economic organization is reenforced when we come to study the wastes and the failures to secure real productivity which characterize every branch of production and distribution. Statistical evidence along these lines is too voluminous to be quoted in a short chapter. Reference can, however, well be made to a recent study\* by a group of engineers in which it is concluded that over 50% of present waste is chargeable to management, less than 25% to labor, and the balance to outside agencies and the public as a whole.

Yet there is much of fallacy in the demand for 100% efficiency. It is relatively simple to set up a highly efficient plan of organization or operation for a given business organization or industry, at a given date, under a given set of conditions, and with a specially selected personnel. But times, conditions, and methods change, men lose health or grow old, and managements cannot be reconstructed day by day. The real test of industrial vigor lies hardly at all in current efficiency, but almost wholly in the annual rate of increase in efficiency. This is a fact that is often instinctively recognized, but is rarely, if ever, stated.

Much of our seeming inefficiency is but the price of growth and progress and evolution.

<sup>\*</sup>Waste in Industry, by the Federated American Engineering Societies.

The oak tree, in its 200 years of life, will scatter a million acorns on the earth in order that one new oak tree may survive the death of the old. Yet if this new oak is in the slightest measure a better tree, or better fitted to survive, than the old, all of this seeming waste is in fact the highest of efficiency. The economic system that gains the most from year to year is in the endeven within the working life of the ordinary man-the most efficient, regardless of theoretical defects and wastes. If we should but sacrifice one-half of one per cent. in our rate of increase in productivity to secure a maximum present gain in efficiency, we should quite certainly be the losers in 20 years, and forever thereafter would lose in increasing ratio.

When, therefore, all the facts have been examined and all the theories have been discussed. the final conviction stands forth that there is no royal road to the economic millenium. problem must be solved as it comes—a better organization here, a better understanding there, a new device in the next place, more foresight and better planning in still another place—and everywhere, a little more of honesty, of public spirit, and of real knowledge, and a little less of demagogy and partisanship—slowly and by infinite adaptation progress will be gained.

# CHAPTER V

# FACING THE FACTS

## A RECOGNITION OF NEW CONDITIONS

OT many months ago, the writer stood in Hyde Park where a fairly representative cross-section of the London population gathers nightly to discuss every imaginable subject of human interest. The coal strike had just been settled. Business depression was acute and the future held small promise of early improvement. In ordinary times many of the speakers would have been arguing for the nationalization of industries, and for other socialistic and communistic plans. But on this night the temper of the crowd had changed. Promises of an early millenium had failed. Radical plans for social change had shown their weaknesses in practice. Nowhere among the hundreds gathered in the park was a voice raised with a concrete proposal, but, on the contrary, there came from all sides the cry "We must study the facts; we must find out what can be done."

This revulsion in popular sentiment seems to have spread over the world. Demagogues and false prophets are beginning to be discredited. The attempt to build up class hatreds and to create class warfare is losing ground. In the face of a common economic disorder and distress the world is hunting for the real facts and for real leadership.

In this changed attitude of mind there is hope. There is hope also in the critical, disinterested, and impartial studies of economic questions that are being made in every country, not only by professional economists, but also by far-seeing labor leaders and by men in responsible positions in business and industry.

In the United States there are at present four scientifically organized and administered bureaus for economic investigations, the National Bureau of Economic Research, Inc., the Harvard Committee on Economic Research, the Pollak Foundation and the Economic Institute. In addition, the National Industrial Conference Board, while frankly supported by a group of business organizations, is, nevertheless, doing much economic work of high scientific character.

These organized activities are supplemented by an increasing volume of popular economic writings and editorial work. Such articles and editorials in the Saturday Evening Post and Colliers, with combined weekly circulations exceeding 3,000,000 copies, are of notably high quality. Further important additions to economic fact and theory are being made by economic and statistical units organized by the

larger banks and business establishments as agencies toward the control and direction of their activities.\*

As the result of this growing interest in economic investigations practically every phase of American political and industrial development is being subjected to a critical scrutiny. The amount of the national income and its distribution—among individuals and by sources—has been very accurately determined, year by year, from 1909 through the war period. Much attention has also been given to questions of industrial organization and relations, to the business cycle and the possibility of controlling its more extreme swings, and to the relations between government and industry.

The combined effect of all these studies has been to build up a growing mass of economic facts that are beginning to be accepted by professional economists, business men and many active labor leaders, as the basis upon which future industrial developments in the United States must take place. The reaction in the United States from the world-wide radical movement of the last few years has not only been more pronounced than elsewhere, but it

<sup>\*</sup>Mention should also be made of the Bureau of Industrial Research which has been devoting its main attention to the coal industry during the last two years, and the Labor Bureau, Inc., which places its services primarily at the disposal of labor organizations.

also differs from the reactions in other countries through the fact that a reaffirmed belief in the essential soundness of American institutions is being supplemented, perhaps more than elsewhere, by an exact knowledge of the facts and viewpoints which must control the future development and evolution of such institutions.

It is the writer's purpose, in the present chapter to discuss briefly some of the more important of these facts and viewpoints, and to indicate in a general way their possible reactions upon organized movements for the improvement of working conditions.

#### POPULATION AND NATURAL RESOURCES

Among the older of economic facts to which attention has been newly directed is the necessity for considering, as an essential part of any broad economic plan, the proper balance in each country between population and natural resources.

It probably never will be true, in a modern civilized state, that population will be limited by an actual shortage of subsistence. But it seems equally certain, for every country and for each stage in economic development, that there is a certain population which will permit the attainment of the highest possible standard It, furthermore, seems certain of comfort. that, irrespective of possible temporary improvements in conditions through economic advancement, population in certain central European and Asiatic countries has already far outrun the point at which maximum human comfort may be maintained. To superimpose on such populations the benefits of modern sanitation, and modern industrial methods, apparently can result only in rapidly rising standards of human desire, accompanied by rapid increases in population and in the pressure of population upon natural resources. The outcome can hardly fail to be renewed great forceful movements of population, and intensified military and economic conflict.

The majority of trained American observers have, for these reasons, ceased to look upon the question of population growth as an academic one. They put it in the forefront of economic problems and feel that, in many parts of the world, it is almost an idle thing to discuss other questions until this great question has been squarely faced.

# **IMMIGRATION**

Closely related to the problem of population pressure is that of immigration. The early immigration to the United States was from peoples closely akin to, and readily assimilable into, the original white population. There were also yast areas of unsettled fertile land. The

theory grew up, therefore, that immigration should be unrestricted and that the American "melting pot" could absorb and assimilate unlimited immigration of whatever kind it might be.

During recent years conditions have become very different. The present immigrants are assimilated with difficulty; many seem to be permanently non-assimilable; and the absence of unoccupied farming lands leads to a harmful concentration of the newer immigration in the large cities. It has, therefore, come to be realized that a nation that is striving for an advanced civilization must preserve a substantial unity of races, of ideals, and of basic standards of living, and must avoid to the utmost the establishment, by accident or design, of any social, industrial, or racial dividing lines which may tend to deny the fullest opportunity to each individual for advancement in accordance with his natural capacity. Such a nation. furthermore, must by no chance become divided into two elements of population, one seeking to maintain higher standards of comfort through the limitation of numbers, and the other tending to bring about lower standards of comfort through population increases of the sort to press hard upon the supporting power of natural resources. A policy of reasonable restriction of immigration into the United States should, therefore, become a permanent one. The immigration of races having racial characteristics, ideals and traditions radically different from those of the original population has tended to destroy social unity, and must, therefore, be checked. The unrestrained pressure of population in European and Asiatic areas must not be permitted to transfer itself, through unrestricted emigration, to the United States.

These newly developed American policies are not peculiar to America alone, and must be looked upon, from a broad economic standpoint, as policies that eventually will find world-wide application.

#### THE DISTRIBUTION OF INCOME

Next in order of importance, after problems of population, immigration, and natural resources, is that of the distribution of income. Since the time of Karl Marx, a large part of the agitation for radical social and industrial change has been based upon the belief that capital was absorbing a large and increasing proportion of the income of modern industrial nations, and that the direct road to improved conditions for the average worker was through the taking over by "labor" of much or all of the income received by "capital." The lack

\*Our socialist critic writes: "It must be said, however, that much of the socialist literature for the last half century has dealt with the wastes of competition, as well as wealth inequality, and that socialists are laying increasing emphasis on

of evidence to justify this belief has, however, been quite fully indicated during recent years by many careful and impartial studies, among which those of Professor Bowley in England and Dr. King in the United States are of special importance. Still more exhaustive and careful studies of the National Bureau of Economic Research in the United States, which have recently been published†, confirm the results of these earlier investigations.

From all of these studies there develop certain primary conclusions which cannot be avoided by any observer who, in good faith, is searching for the facts. These conclusions are substantially the same in general character for all industrial nations. They may be enumerated for the United States as follows:

1. A limitation of the maximum individual income to that of the highly skilled worker (say \$3,000 per annum) with a pro rata distribution

this aspect as time goes on. At the time of Marx, there was little organization among the workers to ensure the workers more than an existence wage, and the profits of capital mounted ever higher. Marx indicated that, while the tendency of capital, unhampered by opposing forces, was to absorb an ever increasing proportion of the social product, capitalism was developing within its bosom a working class ever better organized, ever better educated. Socialists claim that this opposing force to unhampered capitalism, which Marx also predicted would arise, has, by economic and political pressure, largely counteracted the tendency of capital to obtain an increasing share of the product of industry.''

†Income in the United States, the National Bureau of Economic Research, Inc., 474 West 24th Street, New York city.

of all excess to those having incomes equal to or lower than those of such skilled workers would add not over 25% to the lower incomes. This percentage would be noticeably reduced if allowance were made for the income taxes paid by the receivers of the larger incomes. If the upper limit were fixed at \$10,000 per annum, the increase, through a similar redistribution, would be less than 10%. This, again, is without allowance for the heavy personal taxes now paid by those in the \$10,000, and higher, income classes.

- 2. High salaries are a negligible factor in the inequality of income distribution. Practically the whole of such inequality is due to rents and return on capital.
- 3. Separations between total income from labor (personal service), return from capital, and rents of natural resources, are difficult owing to the vast number of small entrepreneurs—farmers, shopkeepers, small manufacturers, self-employed tradesmen, and so forth. Nevertheless it can be said, with sufficient accuracy for practical purposes, that, during the war and early pre-war period in the United States, approximately 68% of the national income was received for labor, 24% was received for capital, and 8% for rent of land and other natural resources. Here, once more, no allowance is made for personal income taxes.

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4. So far as the proportion of the national income accruing to capital and natural resources constitutes a problem, it is separable into several distinct elements. The rent of land and natural resources differs fundamentally from other returns on property, and must have separate consideration under any economic plan. Furthermore, the 24% of the national income that accrues to capital proper can be split into two distinct parts. Somewhat less than one-half of the 24%, or about 11% of the national income, is derived from capital emploved in the larger and more highly organized industries and enterprises-mining, manufacturing, transportation and other public utilities, and banking—and somewhat more than one-half of the 24%, or about 13% of the national income, represents interest and dividends, or their equivalent, on investments in houses, farm equipment, merchandising establishments, equipment of small tradesmen, and so forth

#### THE AVERAGE RATE OF PROFIT

Supplementing these figures as to income distribution are certain other facts, slowly accumulating, which bear very directly upon the relation of the average worker to the so-called "capitalistic system." Many years ago Adam

Smith stated that in his time "double interest" was considered a fair profit; and, curiously enough, there is considerable evidence that perhaps the most accurate general statement that can be made, today, regarding the average rate of return on money employed in business and industrial enterprises, is that going concerns earn "double interest."

With this as his fundamental belief, the present writer accepted some time ago a commission to write a pamphlet telling how a careful investor, by distributing his money among well-chosen new enterprises, could secure nearly double the return that he might by investing in seasoned securities or by loaning his money at current rates of interest. However, the further the subject was investigated the less promising it looked. A considerable inquiry among investment experts revealed no wise investors who had systematically traveled this apparently sure road to fortune. Powerful labor unions, with ample funds in their treasuries to own and control their own enterprises, and with memberships which would assure them of specially favorable markets for their products. showed no such eagerness to enter into the industrial field as might be expected if profits were really equal to "double interest."

The facts seemed to be that figures based on going concerns were highly misleading. Each new enterprise seemed to pass through one or more reorganizations, with accompanying heavy losses to investors, before it really became a going concern; and each going concern sooner or later died, or became wholly or partially The immutable laws of nature apcrippled. plied alike to man and his legal creatures. The corporation, like the man, could not count the earnings of its robust years as clear profit. It, equally with the man, must make provision for youth and old age, for sickness, misfortune and death. This, at least, became the writer's conviction—that taking all legitimate ventures into account, and considering, as a whole, their failures and successes, their many risks and their few certainties, their youth, their robust years, and their old age, the average profit on the capital employed in industry was not "double interest," but on the contrary exceeded "single interest" by a relatively small margin, if any.

#### THE PROFITS OF MARGINAL CONCERNS

The foregoing opinion is shared by many of those observers who are in best position to know the facts. It is, nevertheless, only an opinion, however well grounded, and must await the result of investigations now being planned before it can assume a definite place in economic theory.

There is, however, another analysis of profits in competitive business as to which the facts are more definitely determined. It has been found that when any branch of competitive business is studied by itself, there are great differences in the rates of profit realized by differ-Not only do the concerns vary ent concerns. widely among themselves, when studied over long periods, but each individual concern also shows great variations in profits from year to year. There are not only the variations due to the business cycle, but also the variations due to changes in trade currents, changes in management, and so forth.

As the result of these underlying conditions. it is possible in a normal year to divide the invested capital, in any line of competitive business, roughly into three classes. The first class represents investments in concerns that are on the verge of failure and are earning less than a normal interest on their capital. About 10% of the total capital falls in this class. second class represents capital invested in concerns which, as a group, are earning about a normal interest rate. This is the so-called marginal, or price-fixing, group, in which roughly 40% of the total capital is invested. The third class of capital, amounting to about 50% of the total, represents that invested in the really successful concerns. These concerns earn substantially more than a normal interest on the money employed, and raise the total earnings of all going concerns to something

approximating "double interest."

The most significant fact in connection with this normal distribution of invested capital is that it seems to be independent of the general average of managerial skill in the industry or In other words, if we could conceive all business and industry to be managed with an average skill twice as great as that which now obtains, it is probable that we would still find these same differences in rates of profit. This is what might be expected. It is impossible for all men and all business organizations to be equally skillful or to have equal advantages with respect to location, markets, and so forth, and very slight variations in managerial skill and in natural advantages, as any experienced executive knows, will produce very great variations in profits.

If, then, we accept these variations in rates of profit as necessary and inevitable, we are face to face with a definite series of facts. First of all, the marginal and submarginal groups of concerns turn out 50% of the total product (or 50% of the total services) and must continue to operate if the market is to be supplied. In the second place, the marginal group necessarily fixes the basic prices to be charged by all con-

cerns. And in the third place these marginal concerns, since they earn only a bare going interest rate on their capital, must vary their prices, in the long run, by an amount which will exactly compensate for every change in market wages, which is not accompanied by a corresponding change in productivity.

# THE RELATIVE MONOPOLY POWER OF LABOR AND CAPITAL

All of the preceding facts and viewpoints lead up to the now generally accepted conclusion that material progress for humanity must be sought not primarily in a better distribution of income, but rather in a greater per capita productivity. There is, however, a further conclusion which would develop if it should prove to be true, as seems probable, that capital invested in business and industrial enterprises earns, on the whole and in the long run, only a living wage, i. e., the current rate of interest. This conclusion is to the effect that there is little or no real margin which labor can claim or secure from capital by organized effort to raise the wage paid for a given output. This is certainly true as to the so-called "marginal" and "sub-marginal" concerns, and, as previously indicated, it appears to be true for business and industry as a whole.

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With respect to the efforts of organized labor, there have, in the past, been two opposing economic theories. One was that wages were determined by the relative monopoly power of land, labor and capital. This theory assumed that labor, by establishing a special monopoly power, might secure for itself rewards which otherwise would go to the owners of land and capital. The opposing theory is that labor is the "residuary legatee" and as such receives, in the end, all the gains from improved industrial machinery and productivity except a "living wage" for capital, and ordinary (non-monopolistic) rents. Undoubtedly the truth lies somewhere between these two theories, but the evidence is strong that the possible margins which labor might claim by establishing its monopoly power are much too small to offset the minimum losses to the working population and the community as a whole that must result from any labor program that is based primarily upon the monopolistic idea. It is certainly true that labor cannot hope to gain unless it uses its monopoly power to increase productivity and to secure greater rewards not only for labor, but for invested capital as well.\*

<sup>\*</sup>Our socialist commentator writes, as to this paragraph:

<sup>&</sup>quot;An alternative which labor throughout the world is choosing to an ever greater extent, as has been stated before, is that of social ownership and social investment. Granting, however, the continuance of private investment, it is not clear to labor what rate of interest is necessary to cause people to

### A SPECIAL VIEWPOINT

If we could conceive a situation under which the average worker's hourly wage was made the monetary unit, and the hourly wage of each worker was justly fixed with respect to this unit, taking fair account of his skill and productivity, we should almost automatically have a new political economy. It is of interest to follow through the reactions from such a plan.

First of all, as to hours of labor, we might conceive that each worker would be paid his standard rate up to that number of hours per week at which he could work over long periods

invest extensively enough to keep the industrial machine going and improving. Many people of small means place their savings in the bank, which in turn is an investor, with the expectation of little or no interest—merely as a place for safe keeping until old age. Others are satisfied with low interest on municipal or state bonds. Capital does not need the 'living wage'—in some ways a misnomer—in the same sense as does labor. If interest rates were universally two or three per cent., rather than six per cent., would not the great bulk of capital now invested, continue to be invested? Has this problem been ever adequately considered? Again labor insists that the extent to which modern profits have in them the element of monopoly must be determined before the author's thesis can be proved.

"It is, however, of interest, that a number of the more radical unions of the country, such as, for instance, the Amalgamated Clothing Workers of America, are insisting that their members accompany their demand for higher wages with guarantee of high production standards. The forward looking workers are realizing that productivity must be increased, and in many recent wage disputes they have investigated the administration of their respective industries and have insisted that management should put its house in order and eliminate practices that impede production. At the same time they have frowned upon a suggestion of 'sabotage' by their own mem-

bers."

with full efficiency in his particular occupation, and that for added regular hours of work (as distinguished from emergency overtime) his hourly rate would decrease in such manner as to allow for all elements of decreased efficiency with longer working hours. Very possibly it would be found, in many occupations requiring close concentration or intense effort, that the rate for the ninth or tenth hour would approach The worker under such circumstances zero. would face the facts clearly. He could choose deliberately the length of working day and corresponding income which gave him the greatest real return in comfort, health, and leisure com-He would realize that, except under bined. very rare and special circumstances, the question of hours of labor was one of no international importance whatever. He would see. also, that hours of labor might properly vary in the same occupation as between the city and He might even appreciate the the country. danger of forcing a harmful concentration of industrial development in the larger cities through the establishment of uniform wages and hours of labor in all localities. He might recognize the fact that eight hours of labor in a large city would involve, perhaps, the same strain as nine hours of labor in a country town; and he might agree that the same pay should be given for the nine hours of country labor as for the eight in the city, in order that the saving in labor costs in the country might operate to offset disadvantages in transportation, and so forth, and thus permit many industries to be established in small cities with resulting improvement in the workers' general living conditions.

Next, as to prices of commodities, the worker, as previously indicated, would practically have eliminated questions of wages and hours of labor. His prime interest would, therefore, be in prices. He would look with immediate favor on plans for a larger degree of simplification in the variety and types of essential commodi-He would see very clearly the personal advantages to him in improved processes and machinery, and he would directly and immediately resent any action by other groups of workers that tended improperly to increase the prices of the things he purchased. Finally, also, he might realize that the constant cheapening of commodities upon which his increases in real wages depended could not take place without such rates of return on invested capital as were necessary to encourage enterprise and industrial progress.

All of the preceding viewpoints would come automatically if we had a monetary standard based on the hour of labor. Yet the economic factors and operations would be unchanged. The only difference would be that certain necessary relations, which are now obscured by con-

stant changes in price and wage levels, would become obvious with wage levels fixed once for all, and with prices the only variable. Similarly, it might soon be recognized that no special determinations of the relative value of the labor of different workers and classes of workers could exceed in accuracy or fairness that determination which the combined judgment of the whole community now enforces, and over long periods probably always will enforce, through the operations of the so-called "law of supply and demand."

#### A CONSTRUCTIVE PROGRAM

But the arguments from the hypothetical labor standard of value have been carried far enough. The essential point is that there is growing up in the United States a body of intelligent and human-minded opinion that sees only waste, hopeless conflict, and disorder as the outcome of most of the present effort for the improvement of the conditions of the masses of the working population.

This body of opinion is firmly convinced of the fundamental soundness and productivity of the capitalistic system. It recognizes competitive wastes, but holds these to be less serious and more easily remedied than the unavoidable wastes of a socialistic system. It insists that the law of supply and demand shall govern market wages as well as prices; it contends that forced increases in the market wage result only in increased prices and the advantage of one group of workers over the others; yet it contends, also, that the test of real managerial skill is the ability to pay more than a market wage, without increasing prices, and with mutual profit to employer and employee. It believes in a frank discussion of industrial problems and profits with all employees; but it would share profits and the responsibility of management only with those who are willing

\*As to the waste of the socialistic system, our critic says:

"The argument that socialism will bring about waste and inefficiency is generally based on the assumption that the socialistic system will fail to provide adequate incentive for work. This assumption is in turn based on two further assumptions; namely, that socialists urge an absolutely equal wage to all workers, or a wage according to needs, and, secondly, that the profit incentive is and will always remain the principal incentive for industrial activity. Socialists, however, have no objection to a difference of compensation based on ability and productivity, and declare that, under a system of social ownership, every incentive known to the present system could be brought into play to produce the highest results. They affirm, however, that many other incentives besides the money incentive—the incentive of social prestige, the pleasure coming from creative and artistic activity and the doing of any work well, loyalty to the interest of particular groups, and mere custom, can be utilized in industry much more effectively than they now are. In the cooperative movement, in certain branches of the public service, in many of the professions, and even in business, one sees these incentives now in operation to a greater or less extent. If the criterion of success in business were the character of service rendered the community, rather than the amount of money accumulated, the profit incentive would lose much of its power over men."

to share the risks of the enterprise by investing in its securities. And, finally, it seeks, within each industry, to insure regularity of employment and the fullest possible protection against sickness, accident, incapacity and death.

These points of view, and the program which goes with them, are in themselves fundamentally constructive—but they are destructive of many things that for years have been taught as the very foundations of policy in the labor movement.

For a succession of conflicts and armed truces this opinion would substitute cooperation and the slow building up of sound industrial traditions. For distrust between employer and employee it would substitute mutual confidence and frankness of understanding. For the present militant and monopolistic type of labor organization it would substitute the employees' association and the shop committee, reenforced, as to problems affecting all classes of workers, by national organizations which shall think in terms of economic research and popular education, rather than in terms of the strike and the boycott.

<sup>\*</sup>Our critic comments as follows regarding this paragraph:

<sup>&</sup>quot;The advanced labor movement in this country is laying increasing emphasis on constructive measures which lead to a new status in labor, and is consequently relying less exclusively upon the strike and boycott. A number of national unions are developing research bureaus, as in the case of the railway brotherhoods, the International Ladies Garment

There is today in the United States a growing number of business organizations that are giving practical application to these principles and policies. The response on the part of their employees can perhaps best be illustrated by quoting from a letter written by a previously discontented worker to his superintendent about three years after he had left the employment of one of these companies. The company

Workers and the Amalgamated Clothing Workers. They are building up their own labor colleges, and in 1921 organized a Workers' Education Bureau on a national scale. They are establishing their own banks, going extensively into cooperative enterprises, seeking corrective legislation, setting up a machinery for the settlement of disputes, organizing their own health service, purchasing recreational centers, developing production standards, systems of unemployment insurance, and of shop control, and gradually evolving a labor statesmanship of a high order. Although these developments exist in a minority of unions, recent progress in that direction has been of no small significance.

"National and international unions have come to stay. Local employees are often at a great disadvantage when bargaining with their employers, because of lack of training and their fear of discharge. It is but natural that the workers should turn for aid to an organization of national scope to defend their rights. Most company unions have hitherto been owned body and soul by the company. The present international unions have many faults. Their organization according to craft instead of according to industry, and the exclusiveness of many of them, lead to the greatest amount of confusion. But they are evolving a wiser leadership, and may be depended on as a great force in industrial reconstruction. They are going to be improved not by such campaigns as the recent 'Open Shop' campaign, directed by many toward the annihilation of unionism, but by a recognition that here, as well as abroad, labor has decided to bargain collectively, through organizations of their own choosing, and that unions should be dealt with as legitimate representatives of labor, not as outlaws."

must be nameless, but the writer can vouch for the genuineness of the letter.

"About a year ago I wrote you a very sarcastic letter, regarding your companies' methods of handling labor.... As this is a world in which we live and learn, and time alone proves right from wrong, I want to be as fair to you today, as I was unfair a year ago. I want to tell you, that you were right and I was wrong. I wish to apologize to you like a man for writing that letter. At the time I wrote it I was sincere in my belief that capital did not deal fairly with labor, but I have traveled in France, England, Scotland and Spain since I wrote you, and have always studied labor wherever I went. I am sorry to say that labor has abused its power as much, if not more, than what capital ever done...... I witnessed the coal strike in England, and attended some of their meetings. They only know one thing. their own side of the dispute.

"One of the chief causes of unrest in the world today is the labor unrest. We don't want and we do not need strikes, what we need is more production. An honest day's work for an honest day's pay. I can never see where you benefit by a strike. If a body of men should win a strike, they lose in the long run, because they lose more money while on a strike than what their gains amount to. They also lose the mainspring of their work, which is the enthusiasm and interest they had in their work before the seeds of discontentment set in. To my way of thinking today, there is absolutely no reason why labor and capital cannot meet on a midde ground and settle their disputes without bitterness creeping in. They can if they will only be fair with each other, but it seems as if some of them is always figuring on slipping something over the other fellow..... I think that if men felt like they could go to their employers when they have a grievance, or thought they had a grievance, and talk to him, man to man, and that he would listen and reason with them to be fair and honest, you would soon do away with all the unrest of labor.......

"In every country and every meeting I ever attended I have always spoken of the loyalty of employees of the Company. You can safely say that you have the most loyal and efficient group of men and women in your employ of any organization in the world. It is something that grows on you. You cannot work for the Company long before you are either one or the other, either you are intensely loyal or you are not the type that has made the business what it is today. If you are of that type you never get it out of your blood......

"In closing I want to say that although you were slow in starting to meet the advance cost of living, that your company has acted splendidly by their employees. I am honest, and while you told me in your office that day that you would gradually work out the wage question, I did not believe you at that time. I did not think you were sincere. Once again showing me that I was wrong and you were right.

"In closing, I will say this and you can use it wherever you like or whenever you like, and it is this, that while I have worked for several different companies, traveled in several different countries, and met men of all kinds, I never have received as fair and square treatment, never worked with a cleaner, fairer and squarer bunch of men and women than when I was with the Company. I also want to thank you personally for the square way you treated me. Most employers would have discharged me at once. It has taken time to make me realize those things but, I am grateful to you nevertheless."

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